



**PERFORMANCE WORK STATEMENT  
CONTRACT EP-C-16-003  
WORK ASSIGNMENT 1-20**

**TITLE:** National Pretreatment Program Support

**WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE (WACOR):**

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**PERIOD OF PERFORMANCE:** September 16, 2016 through June 30, 2018

**PURPOSE:** The Water Permits Division (WPD) within the Office of Wastewater Management (OWM) is responsible for the development and implementation of the National Pretreatment Program, which is a component of the National Pollutant Discharge Elimination System (NPDES) program. This program and its regulations address requirements for and oversight of Publicly Owned Treatment Works (POTWs) and Industrial Users (IUs, who are non-domestic dischargers), as well State programs to oversee the POTWs and IUs. These regulations and programs require states and POTWs to develop local pretreatment programs to assess, manage, and regulate pollutants introduced into POTWs from IUs. The goals of such pretreatment programs include reducing the risk to human health and aquatic life resulting from the POTW wastewater (effluent) discharges and sludge disposal options by preventing the interference of the POTW treatment plant operations and pass through of pollutants, to improve opportunities to recycle, reclaim, and reuse municipal and industrial wastewaters and sludges, and to prohibit the introduction of pollutants which result in the presence of toxic gases, vapors, or fumes that may cause acute worker health and safety problems. To achieve these goals, OWM is committed to



developing and updating guidance materials and instructional materials to communicate such existing, new, and newly revised requirements to IUs, municipalities, states, and EPA Regions.

**OBJECTIVE:** This work assignment will provide a broad base of technical and administrative tools to support EPA's implementation of the Pretreatment Program Regulations (40 CFR 403). Contractor support shall provide resources needed to support EPA and its State partners in the development of outreach materials (e.g., guidance, fact sheets, case studies, briefings), support training opportunities (e.g., workshops and webinars), and support assessment of POTW and state strategies (using EPA checklists and models, and compiling data from EPA databases).

In addition, existing new regulations, standards, and policies have been issued or in the process of being developed, with which existing guidance materials and instructional materials need to be updated and communicated, or for which new outreach materials need to be developed.

## **TASKS:**

### **Task 0 - Work Plan, Budget Development and Management**

The contractor shall participate in a kickoff conference call with the WACOR within 30 days of the work assignment's effective date.

The contractor shall prepare a detailed work plan and budget for the accomplishment of the indicated tasks in accordance with the clause Work Assignments (EPAAR 1552.211-74). The work plan shall include a description of: (a) proposed staff; (b) an estimate of hours to be spent on each task by each staff person (prime and subcontractors); and (c) a list of deliverables, with due dates and schedule for deliverables. This task also includes monthly progress and financial reports which shall conform to the requirements particularized to the clause, F.3 MONTHLY PROGRESS REPORT (EPAAR 1552.210-72) (JUN 1996).

The contractor shall meet with the WACOR either in person or via telephone approximately three to four (3-4) hours per month to discuss work assignment planning issues. During this regular meeting, the contractor shall be prepared to discuss updates for tasks outlined below and the contractor shall provide a summary update for tasks via email before each meeting.

### **Task 1: Rule Revisions Follow-up Activities: Guidance Manual Update and Informational Brochure Development [3.4, 3.7, 3.8]**

EPA revised the General Pretreatment Regulations at 40 CFR Part 403 twice in 2005 ("Streamlining", 70 FR 60135, October 14, 2005, and "CROMERR", 70 FR 59848-89, October 13, 2005), once in 2015 (NPDES Electronic Reporting Rule, 80 FR 64064-158, October 22, 2015), once in 2016 (Unconventional Oil and Gas Extraction Effluent Guidelines, 81 FR 41845-57, June 28, 2016), once in 2017 (Dental Effluent Guidelines, 82 FR 27154-78, June 14, 2017) and recently proposed a revision to the NPDES Regulations ("NPDES Applications and Program Updates Rule", 81 FR 31343-31374, May 18, 2016) that affect the pretreatment program. Regulation revisions affecting the pretreatment program are also forecast for other media (e.g., "MACT for POTW", 81 FR 95352-96, December 27, 2016; "Hazardous Waste

Pharmaceuticals”, 80 FR 58014-92, September 25, 2015). Consequently, EPA continues to review existing guidance manuals and informational brochures and prioritize them for updating in order to ensure consistency with current regulation and policy.

The Office of Wastewater Management (OWM), also, in support of effluent limitation development for both NPDES Permits and IU Control Mechanisms, works with other EPA Offices to communicate results of studies, the development of new analytical methods and the use of monitoring tools. For example, OWM may summarize the results of an Office of Water/Office of Science and Technology (OST) industry sector “detailed study” conducted as part of the Effluent Guidelines Program into an informational brochure of approximately 5 pages in length to help permit writers or to improve potential permittees’ understanding of their regulatory responsibilities or might compile a set of “Frequently Asked Questions” into a document for publication.

For this task, the contractor shall support EPA by:

- For all documents:
  - Participating in EPA workgroup conference calls, collecting and compiling written comments and verbal comments received during the conference calls.
- For documents selected for revision:
  - Reviewing the existing manuals and identifying provisions that have been the subject of regulation or policy change since publication;
  - Recommending draft text to incorporate new regulation and policy change into the draft manuals.
- For documents that have received comments:
  - Recommending text to address comments received within 2 weeks of receipt of comments;
  - Editing the draft documents to incorporate EPA’s decision on the recommended ways to address received comments within 2 weeks of EPA direction;
  - Following receipt and incorporation of edits from EPA management review, the contractor shall process final document for publication and/or webposting.

Subtask 1A. Guidance Manual Updates [3.4, 3.8]: Document updates are currently in various stages of completion: some document updates are being drafted, some are in draft form and being reviewed by stakeholders and management, and some are being finalized after resolution of received comments. Documents #1 and #2 are companion documents and “over-arching” general programmatic documents, that may need additional edits as the other documents (further down on the list below) are updated and revised. For all documents, contractor shall provide technical editing services prior to web publication and conform to Agency web publication requirements. Per technical direction from WACOR, contractor shall assist EPA in comment resolution processes outlined below for each manual.

1. *Procedures Manual for EPA and States Reviewing a POTW Pretreatment Program Submission* (“Procedures Manual” update to October 1983 document) – WACOR has a draft final document into which stakeholder comments (EPA Regional staff and State Coordinators) have been incorporated. EPA will provide electronic file to contractor. Contractor shall support EPA to identify needed revisions to this document, as needed, to ensure agreement with associated topics discussed in the documents below (particularly the Guidance Manual for POTW Pretreatment Program Development), as the documents below are updated and revised.
2. *Guidance Manual for POTW Pretreatment Program Development* (“Development Manual” update to October 1983 document) – WACOR is currently reviewing a draft document prepared under a different contract. EPA will provide electronic file to contractor. EPA plans to distribute draft document for stakeholder review (EPA Regional Staff and State Coordinators). Contractor shall support EPA by developing an index of comments received, and drafting responses to address the comments received. Contractor shall incorporate revisions after EPA’s approval. Contractor shall support EPA in identifying corresponding topics in the Procedures Manual (#1, above) and drafting revised text to ensure agreement between these two companion documents.
3. *Guidance for Developing Control Authority Enforcement Response Plans* (“ERP Manual” update to September 1989 document) – EPA is currently reviewing a draft document prepared under a different contract. EPA will provide electronic file to contractor. Contractor shall support EPA by revising document upon receiving comments from EPA, and shall support EPA in soliciting stakeholder comments (EPA Regional staff, State Coordinator, and POTWs/National Association of Clean Water Agencies). EPA expects to conduct comment solicitation in stages [e.g., first EPA followed by states and NACWA]. Contractor shall support EPA by indexing comments received and drafting revised text to address the comments received, incorporating EPA approved revisions as necessary. Contractor shall support EPA in identifying corresponding topics in Manuals #1 and #2 (above) and drafting revised text to ensure agreement between these three documents.
4. *Guidance Manual for the Control of Wastes Hauled to Publicly Owned Treatment Works* (“Hauled Waste Manual” update to September 1999 document) – EPA is currently reviewing a draft document prepared under a different contract and a separate FAQ document on hauled waste regulation applicability to anaerobic digesters. EPA will provide electronic file to contractor. Contractor shall support EPA by revising document upon receiving comments from EPA, and shall support EPA in soliciting stakeholder comments (EPA Regional staff, State Coordinator, and POTWs/National Association of Clean Water Agencies). EPA expects to conduct comment solicitation in stages [e.g., first EPA followed by states and NACWA]. Contractor shall support EPA by indexing comments received and drafting revised text to address the comments received, incorporating EPA approved revisions as necessary. Contractor shall support EPA in identifying corresponding topics in Manuals #1 and #2 (above) and drafting revised text to ensure agreement between these three documents.
5. *Industrial User Permitting Guidance Manual, Appendix I – Combined Wastestream Formula and Appendix J – Production-Based Standards* (Appendices were previously a standalone document entitled Guidance Manual for the Use of Production-Based Pretreatment Standards and the Combined Wastestream Formula, update to September

1985 document) – EPA is currently reviewing a draft document prepared under a different contract. EPA will provide electronic file to contractor. Contractor shall support EPA by revising document upon receiving comments from EPA, and shall support EPA in soliciting stakeholder comments (EPA Regional staff, State Coordinator, and POTWs/National Association of Clean Water Agencies). EPA expects to conduct comment solicitation in stages [e.g., first EPA followed by states and NACWA]. Contractor shall support EPA by indexing comments received and drafting revised text to address the comments received, incorporating EPA approved revisions as necessary. Contractor shall support EPA in identifying corresponding topics in Manuals #1 and #2 (above) and drafting revised text to ensure agreement between these three documents.

Subtask 1A Deliverables: Contractor shall recommend revisions to address comments within 2 weeks of receipt of comments from EPA and other stakeholders. Contractor shall revise final documents within 2 weeks of WACOR concurrence in suitable format for publication, and website posting.

Subtask 1B. Informational Brochures [3.4, 3.7, 3.8]: For items #1-3 below, documents are currently in various stages of completion: some document updates are being drafted, some are in draft form and being reviewed by stakeholders and management, and some are being finalized after resolution of received comments. Information from some of these documents will ultimately be incorporated into updates to the Guidance Manuals listed in Subtask 1A. For all documents, contractor shall provide technical editing services prior to web publication and conform to Agency web publication requirements. Per technical direction from WACOR, contractor shall assist EPA in comment resolution processes outlined below for each document.

1. *Applicability of pretreatment standards to Anaerobic Digester* (“Digester memo”) – EPA is currently reviewing a draft document prepared under a different contract. EPA will provide electronic file to contractor. Contractor shall support EPA in soliciting stakeholder comments (EPA Regional staff only). Contractor shall support EPA by indexing comments received and drafting revised text to address the comments received, incorporating EPA approved revisions as necessary. Contractor shall support EPA by preparing document for finalization (technical editing, formatting, 508 compliance for webposting).
2. *Streamlining Significant Non-Compliance (SNC) Factsheet* (“SNC Factsheet” based on 2005 regulation changes) – EPA is currently reviewing a draft document prepared under a different contract. EPA will provide electronic file to contractor. Contractor shall support EPA in soliciting stakeholder comments (EPA Regional staff only). Contractor shall support EPA by indexing comments received and drafting revised text to address the comments received, incorporating EPA approved revisions as necessary. Contractor shall support EPA by preparing document for finalization (technical editing, formatting, 508 compliance for webposting).
3. *Pretreatment Program pH Requirements for Industrial Users* (“pH FAQs”) – EPA is currently reviewing a draft document prepared under a different contract. EPA will provide electronic file to contractor. Contractor shall support EPA in soliciting stakeholder comments (EPA Regional staff only). Contractor shall support EPA by indexing comments received and drafting revised text to address the comments received,

incorporating EPA approved revisions as necessary. Contractor shall support EPA by preparing document for finalization (technical editing, formatting, 508 compliance for webposting).

Per technical direction from WACOR, the contractor shall also anticipate developing 1 short informational brochures (e.g., “Frequently Asked Questions” [FAQs] format or case study reports), approximately 5 pages in length, designed to help NPDES permit writers and Pretreatment Program Coordinators on a variety of topics pertinent to program implementation, typically by reformatting previously published materials (e.g., excerpting preamble language from a published regulation on a particular topic). Example subjects might include recent changes in the federal regulations, recent studies completed on particular industry sectors as part of the Effluent Guidelines Program Plan (Clean Water Act Section 304(m)), or Frequently Asked Questions compilations for various topics.

Subtask 1B Deliverables: Draft document shall be completed within 30 days of technical direction. Upon receipt of comments from EPA, contractor shall submit revised draft-final version of document to EPA within 2 weeks of EPA comments. Contractor shall revise final documents within 2 weeks of WACOR concurrence in suitable format for publication, and website posting.

## **Task 2: EPA-Regional and State Technical Activities Support [3.1, 3.4, 3.7, 3.8, 3.9, 6.0, 6.1, 7.0, 9.0]**

Subtask 2.A. Audits and Inspections [9.0]: The contractor shall support EPA in conducting on-site program reviews and more formal program “audits” or inspections of States and/or POTW Pretreatment programs [Pretreatment Compliance Audit or PCA, and Pretreatment Compliance Inspection or PCI, respectively]. Inspections shall include an assessment of the extent to which States, POTWs or industrial discharges to POTWs, are complying with requirements in approved Pretreatment Programs, POTW National Pollutant Discharges Elimination System (NPDES) Permits and IU permits, State and federal regulations. The contractor shall follow the procedures outlined in the EPA audit guidance manual, preparing forms and a narrative summary. See Control Authority Audit Checklist and Instructions (EPA #833/B-10-001, February 2010) [http://www3.epa.gov/npdes/pubs/final\\_pca\\_checklist\\_and\\_instructions\\_%20feb2010.pdf](http://www3.epa.gov/npdes/pubs/final_pca_checklist_and_instructions_%20feb2010.pdf) and updates, and also Form 3560. Refer also to newly updated IU Inspection and Sampling Manual (EPA #831/B-17-001, January 2017, <https://www.epa.gov/sites/production/files/2017-01/documents/iuinspect.pdf>). For Pretreatment Compliance Inspections (PCIs), the same general procedures are followed. For both PCAs and PCIs, certain program elements (e.g., legal authority review, local limits development) may be identified by the EPA Regional coordinator per site for exclusion from the overall review.

Audits and Inspections shall be performed by credentialed staff that satisfy the following requirements:

- Inspector credentials as required by Contractor Credentials Guidance Memo (dated 31 May 2013), including, but not limited to, completion of mandatory inspector training requirements identified in EPA Order 3500.1
- Minimum 5 years’ experience performing pretreatment audits and inspections of POTWs and industrial users, including:

- Pretreatment program development and evaluation
- Standards application (standard and specific prohibitions, categorical standards, local limits)
- Local limits development

If a team of two or more employees is conducting an audit or inspection, at least one member of the team should have a minimum of five years' experience performing pretreatment audits and inspections.

- Satisfactory knowledge and skills required in Table 2.2 of IU Inspection and Sampling Manual

EPA or the State will furnish the contractor with background documents (POTW permit and fact sheet, annual report, prior audit report) particular to each POTW Pretreatment Program, with which the contractor is expected to be familiar prior to the audit/inspection. Such familiarization is expected to take approximately 8 hours of collective staff time prior to each audit. The contractor shall not conduct any sampling or analysis of POTW or industrial user influent or effluent, nor statistical sampling.

The contractor shall support EPA Region 2 for 5 audits in New York state. These audits should be complete by the end of the FY17 (end of September 2017). EPA staff will perform the legal authority review, local limits review and enforcement response plan review for these facilities. EPA may send one new staff member on these audits for training purposes. The contractor shall also only send one staff member on each of the audits. The contractor shall anticipate the following audits:

1. Amsterdam POTW with 2 IU inspections as part of the audit:
  - a. Power and Composite Technologies, LLC at 200 Wallins Corners Rd
  - b. AECOM Ward Products
2. Little Falls POTW with 2 IU inspections as part of the audit:
  - a. Empire Fiber Glass Products at 17 Riverside Industrial Parkway (non-SIU)
  - b. Feldmeier
3. Niagara Falls POTW with 2 IU inspections as part of the audit:
  - a. Plastic2Oil at 20 Iroquios Street (non-SIU)
  - b. CRS Trucking (40 CFR 442)
4. Rome POTW with 2 IU inspections as part of the audit:
  - a. Goodrich
  - b. Owl Wire
5. Tonawanda POTW with 2 IU inspections as part of the audit:
  - a. DTE (40 CFR 437)
  - b. FMC TSED (40 CFR 433)

The contractor shall combine the Niagara Falls and Towanda audits during one site visit and the Little Falls and Rome audits also during one site visit in order to optimize traveling costs.

Per technical direction from WACOR, contractor shall support EPA in the following activities. The contractor shall estimate its manpower and cost requirements based upon the following projections:



Review of approximately 2 small to medium POTW pretreatment programs (< 15 Significant Industrial Users (SIUs) to begin upon WACOR identification of locations. A PCA of this size would typically require two experienced technical employees (contractors) each, whereas a PCI is more abbreviated (as described above). The WACOR will identify specific locations, and any specific dates, upon coordination with State and EPA Regional Coordinators.

Subtask 2A Deliverables: Draft audit/inspection report due within 30 days of conducting onsite activities. Draft report will be revised and finalized within 10 days of the WACOR providing comments to contractor.

Subtask 2B. Program reviews [3.1, 3.4]: Per technical direction from WACOR, the contractor shall support EPA's assistance to States and Regions in examining received POTW pretreatment strategy reports, typically as a more in-depth analysis of a single programmatic element. Typical documents for review include individual POTW program elements, such as an IU "industrial waste survey" (identifying industrial pollutant sources to POTWs), a local limits development package, or a local ordinance (assessment of legal documents supporting local pretreatment program strategy). Contractor is advised to calculate manpower and cost requirements based upon projections for approximately three of these program element reviews.

Subtask 2B Deliverables: Draft program review summary, within 30 days of written technical direction to begin the effort. Draft reports will be revised and finalized within 10 days of the WACOR providing comments to contractor.

Subtask 2C. Meeting Support, Conferences, Training Events [3.9, 6.1]: The contractor shall support EPA in conducting training on pretreatment, industrial and municipal wastewater topics. General Meeting and Training Support shall include procuring conference space, compiling and updating already developed training materials or developing specialized training materials for a particular program subject or area (e.g., ICIS data entry and using ECHO, dental regulation implementation, hazardous waste, anaerobic digesters), drafting proposed agenda following conference call with EPA, registering students for the training, compiling handout materials for students, presenting materials (as part of a team of EPA, state, and municipal representatives). Depending on the specific training event and topics, the bulk of the student handout materials may be provided electronically for download.

All training events are pending technical direction from WACOR. The contractor is advised to calculate its manpower and cost requirements based on training support expected for:

- 1 event of 3-day duration in March 2018, at EPA-Headquarters, for approximately 30 personnel (i.e. National Pretreatment Meeting)
- 3 events of 2-day duration for approximately 100 municipal and state employees, coordinated with EPA Regional pretreatment staff, on general pretreatment program topics. Locations will be comparable to costs for a training in Chicago, IL.
- 4 events of 2-day duration for approximately 30 inspectors from EPA Regions. Locations will be comparable to costs for a training in Washington, DC. These training will be part

of EPA's National Enforcement Initiative (<https://www.epa.gov/enforcement/national-enforcement-initiative-keeping-industrial-pollutants-out-nations-waters-fiscal>) and will specialize in 4 industry sectors: food processing, metals, mining and chemical manufacturing. Contractor shall provide sector experts for in-class trainings.

For the National Pretreatment Meeting, support is not needed to provide "instructors." Moderators and note-takers are only required for the National Pretreatment Meeting. For the EPA-Headquarters event, conference space in the EPA building has already been secured; otherwise, contractor shall give preference to no-cost local municipal or state or federal facilities for conference space before contracting with conference space for cost. Hotel "block of rooms" for participants shall only be needed to be reserved for the Regional and municipal/state event, and location will be communicated to contractor by EPA COR after consultation with applicable EPA Region staff.

Subtask 2C Deliverables: The contractor shall support EPA with development of agenda, presentation materials, and instructors. A draft agenda shall be finalized at least 30 days prior to each event. Draft presentation and training material shall be finalized within 15 days prior to each event. Agenda, presentations, training materials and compilation of student handouts shall be finalized 5 days prior to each event. Contractor shall finalize meeting notes and action items within 10 days following the event. Comments from EPA shall be incorporated within 5 days of EPA direction. Contractor shall develop event evaluations and finalize evaluation reports within 10 days following the event.

Subtask 2D. Development of Training Materials [3.4, 3.7, 3.8, 6.0]: In January 2017, EPA released an updated version of the Industrial User Inspection and Sampling Manual for POTWs: <https://www.epa.gov/sites/production/files/2017-01/documents/iuinspect.pdf>. EPA would like to create training material for IU inspections based on the revised manual. Per technical direction from WACOR, contractor shall assist EPA in requesting and compiling existing appropriate training and presentation material. Contractor shall assist EPA in creating revised training materials that follow the structure and recommendations in the new manual. Ultimately, these training materials may be used in webinars or in-person training, however, EPA does not have any such events planned at this time.

Subtask 2D Deliverables: Work shall not begin until contractor receives appropriate technical direction. The contractor shall assist EPA in the following ways:

- Compile existing appropriate presentation and training material
- Determine training module topics and lessons to complement the structure and recommendations in the new manual
- Use existing materials to create modules or lessons within 30 days of EPA direction
- Create new training materials when no existing material is available within 60 days of EPA direction
- Ensure all training materials are 508 compliant and ready to be posted either on the public website or one of EPA's sharesites



Subtask 2E. Webinar Support [6.0, 6.1]: The WACOR will identify 4 topics which the contractor shall develop (or convert an existing topic) into a training module format (typically Microsoft PowerPoint compatible), and provide webinar support. The Webinars have not been scheduled as of yet, and may be spaced equally throughout the period of performance. For planning purposes, the contractor shall assume that a webinar will be approximately 1.5 hours in length and may be ‘attended’ by up to 1000 connections and shall be archived and posted with access on the EPA website for future viewing.

Topics will be determined during scheduled conference calls with the WACOR within 30 days of work assignment issuance. Anticipated topic areas may include:

- Calculating Permit Limits for Industrial Users (Combined Wastestream Formula and Production-Based Standards)
- Legal authority and Enforcement Response Plans
- Reporting under 40 CFR 403.12(j) and (p)
- Data tools for Permit Writers and Permittees
- Hauled Waste and Anaerobic Digesters
- Industrial User Inspections

Subtask 2E Deliverables: The contractor shall be responsible for providing staff support for the following items:

- Assist EPA with setting up webinar date, identifying necessary equipment and making appropriate reservations for webinar.
- Assist EPA in Notifications/Advertisement of Webinar, including an announcement on EPA’s webpage. Announcements shall be broadcast at least 30 days prior to event.
- Assist in setting up and managing enrollment for the webinar using the appropriate designated EPA platform (e.g., Adobe Connect), support for managing registration of participants and providing webinar logistics.
- Work with EPA to finalize slides and other training materials (limited support required). Agenda, presentations, and training materials shall be finalized 5 days prior to each event.
- Develop and distribute certificates of participation to attendees.
- Develop event evaluations and finalize evaluation reports within 5 days following the event.
- Assist EPA to arrange for recording and archiving of the webinar on an EPA webpage within 5 days of event.

### **Task 3: EPA National Program Implementation Support [3.1, 3.4, 3.7, 6.0, 7.0]**

The contractor shall provide general program support for a variety of technical and administrative activities.

Subtask 3A. Oversight Activities [3.1]: EPA has developed permit quality checklists for use in assessing NPDES permits issued to POTWs and IU permits. EPA checklists and assessment guidance are currently posted on EPA website: <https://www.epa.gov/npdes/npdes-program-management-and-oversight#pqr>. In the new PQR cycle (FY18-22), pretreatment will continue to be a National Topic Review area, however, the scope of these reviews will become more focused. EPA's Office of Enforcement and Compliance Assistance (OECA) has launched its 2017-2019 Industrial National Enforcement Initiative (NEI) and chosen to focus on the food processing, metals, mining and chemical manufacturing sectors. Many of these industries are indirect dischargers and regulated under the pretreatment program. To coordinate this effort with the Office of Water's PQRs, EPA plans to focus on indirect dischargers in the food processing sector both in cities with and without pretreatment programs. EPA is currently developing a draft checklist and guidance for this review process, which should begin in FY18.

For states where EPA is the Pretreatment Program Approval Authority, following technical direction, the contractor shall draft Pretreatment PQR reports that characterize the results of the permit assessment (e.g., identifying action items to return permits to compliance with regulatory requirements and policy, deficiencies in documentation, etc.) using a format provided by the WACOR, report on compliance activity status (typically obtained from EPA Integrated Compliance Information System database (ICIS-NPDES)).

Permit Quality Reviews in progress or anticipated for FY17 (previous PQR cycle) include:

1. Colorado (Summer 2017)
2. Nevada (Fall 2017)

EPA is still finalizing its new PQR schedule for FY18. Contractor shall anticipate conducting a maximum of 3 additional PQRs under the new review plan. Work shall not begin until technical direction from WACOR.

Subtask 3A Deliverables: Draft Pretreatment PQR report shall be completed within 30 days of technical direction. The contractor shall edit the draft documents to incorporate EPA's comments within 2 weeks of receipt of EPA's comments.

Subtask 3B. Data Management [3.1, 3.4]. EPA issued the NPDES Electronic Reporting Rule on October 22, 2015 <http://www2.epa.gov/compliance/final-national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule>.

- Electronic Reporting by POTWs of annual pretreatment program reporting is required in accordance with Phase II of the rule, i.e., 2020.
- Electronic Reporting by Industrial Users for which States and EPA are the Control Authority is required in accordance with Phase II of the rule, i.e., 2020.

WACOR and WPD Pretreatment Team are members of the Agency workgroup to support development of forms and guidance for implementation of this rulemaking. The first step in receiving reports electronically requires entry of “facility level data”, permit limits information, and other system required elements into ICIS-NPDES.

1. Per technical direction from WACOR, contractor shall support EPA to update facility level data [provided by EPA or States] for which Industrial Users for which States and EPA are the Control Authority.
2. Per technical direction from WACOR, contractor shall support EPA in updating, as necessary, existing ICIS-NPDES pretreatment data entry guidance, as forms may have changed with the promulgation of the subject rulemaking.

Contractor shall assume 5 IU Facility Level spreadsheets for purposes of estimating cost and manpower.

Subtask 3B Deliverables:

1. Contractor shall provide updated spreadsheets of IU facility level data within 30 days of assignment.
2. Contractor shall provide edits to the Draft Revised Data Entry Guidance due within 2 weeks after issue has been identified.

Subtask 3C. Support EPA communications and outreach [3.7, 6.0, 7.0]: Per technical direction from WACOR, contractor shall:

1. Attend and summarize discussions from conference calls with EPA Regional Pretreatment Coordinators (typically monthly) and conference calls with State Pretreatment Coordinators (typically held every other month). Contractor shall add metadata to call summaries when posting to SharePoint.
2. Summarize or index significant discussions (including from Listserv) when identified by EPA. Contractor shall assume 4 listserv summarizations for purposes of estimating cost and manpower.
3. Assist EPA with enhancements and maintenance of EPA Pretreatment Program share sites, including support of uploading documents to Pretreatment Program SharePoint sites;
4. Support EPA with Pretreatment public website enhancements and maintenance.

Subtask 3C Deliverables:

1. Draft conference call summaries within five working days of the call date.
2. Listserv summaries within five working days of technical direction from EPA.
3. Posting of documents to share sites within five working days of identification.
4. Website edits within five working days of technical direction from EPA.

## **QUALITY ASSURANCE STATEMENT**

QA Statement: EPA requires an approved QAPP whenever tasks involve the generation, distribution or use of environmental data which will be used, or has the potential for being used, in environmental decision making. Environmental data is information that describes environmental processes, locations or conditions, and health effects or consequences. It can be collected directly from measurements (primary data), produced from models, or compiled from other sources (existing or secondary data). Tasks included above do not involve collecting, assessing, or calculations using environmental data. A Work Assignment level QAPP is not necessary.

## **OTHER REQUIREMENTS**

### **Software Applications and Accessibility**

Word processing files delivered to the Government shall be Microsoft Word, 8.0 or higher. All software and electronic information technology shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Files that are available on the website will be delivered to the contractor. Web-based intranet and internet information and applications. See: <http://www.section508.gov>.

- Preferred text format: MS Word, 8.0 or higher (MS Office 2007 or higher)
- Preferred presentation format: Power Point, Office 2007 or higher
- Preferred graphics format: Each graphic is an individual graphic file (.bmp, .gif, .jpeg, .tif, .png files preferred – contractor shall deliver full-sized images or vector-based graphics unless otherwise requested.)
- Preferred portable format: Adobe Acrobat, Version 6.0

### **Reporting**

Progress reports shall be submitted in accordance with the reporting requirements of the contract. In addition, the contractor shall maintain contact with the WACOR to advise of progress and problems. All documents shall be delivered in Word, Excel, HTML, and/or PDF format, as requested by the WACOR. The contractor shall notify the WACOR immediately when expenditures of 75% and 90% of the work assignment LOE or funding (including pipeline costs) are reached.

The contractor shall be prepared to submit for inspection copies of all work in progress any time as requested by the WACOR. The contractor shall not release information or comments on works performed under this work assignment without the WACOR's prior written authorization. Wherever practicable, all written materials submitted to EPA must be doubled-sided and on recycled paper. All computer disks submitted to the WACOR shall be scanned for, and identified as free from viruses.

### **Travel**

All travel shall be approved in advance by the Contract-Level Contracting Officer's Representative (CL-COR) and shall be in accordance with the contract. Travel is expected to

occur for specifically Task 2.

### **Information Collection**

All collection of information and data shall be in accordance with the Office of Water Quality Management Plan and OMB requirements under the Paperwork Reduction Act.

### **Meetings, Conferences, Training Events, Award Ceremonies and Receptions**

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, shall be obtained by the CL-COR as needed and provided to the Contracting Officer. Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the CL-COR.

### **Conference / Meeting Guidelines and Limitations**

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The WACOR will then prepare internal approval paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

<b>Table: Deliverables Schedule</b>		
<b>Task</b>	<b>Deliverables Summary</b>	<b>Due Date</b>
Task 1.A: Guidance Manual Updates	1. Recommend text to address comments received 2. Finalize draft documents for publication and webposting	1. Within 2 weeks of receipt of comments from EPA 2. Within 2 weeks of EPA direction
Task 1.B: informational brochures or FAQs	1. Draft Fact Sheet 2. Revisions to Fact Sheet 3. Finalize draft documents for publication and webposting	1. Within 30 days of receipt of information from WACOR 2. Within 2 weeks of EPA comments 3. Within 2 weeks of EPA direction
Task 2.A: Audits and Inspections	1. Draft Audit and/or Inspection Report 2. Final Audit and/or Inspection Report	1. Draft reports due within 30 days of conducting onsite activities. 2. [Draft] final reports will be revised and finalized within 10 days of WACOR providing comments to contractor
Task 2.B: Program Reviews	1. Draft Program Review Report 2. Final Program Review Report	
Task 2.C: General Meeting and Training Support	1. Draft agenda 2. Draft presentation and training material 3. Final agenda, presentations and training materials 4. Draft meeting notes 5. Finalize meeting notes 6. Summary of conference evaluations	1. At least 30 days prior to event 2. At least 15 days prior to event 3. At least 5 days prior to event 4. Within 10 days following event 5. Within 5 days of EPA direction 6. Within 10 days following event
Task 2.D: Development of Training Materials	1. Draft training modules or lessons from existing materials 2. Draft new training modules or lessons	1. Within 30 days of EPA direction 2. Within 60 days of EPA direction
Task 2.E: Webinars	1. Announcement of webinar 2. Finalize agenda, presentations and training material 3. Summarize evaluations 4. Archiving and posting webinar	1. At least 30 days prior to event 2. At least 5 days prior to event 3. Within 5 days of event 4. Within 5 days of event

Task 3A: Continued Oversight Activities	1. Draft PQR Report 2. Edits of draft PQR Report	1. Within 30 days of technical direction 2. Within 2 weeks of receipt of EPA comments
Task 3B: Data Management Strategy	1. Updated spreadsheets 2. Edits to Draft Revised Data Entry Guidance.	1. Within 30 days of receipt of materials from EPA 2. Edits submitted within 2 weeks of EPA direction
Task 3C: EPA communications and outreach	1. Conference call summaries 2. Listserv summaries 3. Revised/posting of documents on SharePoint or EPA website	1. Within 5 working days of call date 2. Within 5 working days of technical direction 3. Within 5 working days of technical direction

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-20																																																																					
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001																																																																					
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			Base                      Option Period Number    1			National Pretreatment Support																																																																					
Contractor EASTERN RESEARCH GROUP, INC.					Specify Section and paragraph of Contract SOW See PWS																																																																						
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<input type="checkbox"/> Work Plan Approval					From 03/08/2018 To 06/30/2018																																																																						
Comments: The purpose of this Amendment 1 is to remove the previously established funding ceiling of \$128,064.00 as this Work Assignment is now fully funded.																																																																											
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund																																																																											
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A.																																																																											
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<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-21				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-16-003			Contract Period   07/01/2016   To   06/30/2021 Base                      Option Period Number    1			Title of Work Assignment/SF Site Name R2 NPDES Program Support				
Contractor EASTERN RESEARCH GROUP, INC.					Specify Section and paragraph of Contract SOW See PWS					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance  From   09/20/2017   To   06/30/2018				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund           Accounting and Appropriations Data           <input checked="" type="checkbox"/> Non-Superfund         </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
07/01/2016   To   06/30/2021										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:					Cost/Fee		LOE:			
Cumulative Approved:					Cost/Fee		LOE:			
Work Assignment Manager Name   Sieglinde Pylypchuk							Branch/Mail Code:			
_____ (Signature)							_____ (Date)			
Project Officer Name   Tangela Cooper							Branch/Mail Code:			
_____ (Signature)							_____ (Date)			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature)							_____ (Date)			
Contracting Official Name   Brad Heath							Branch/Mail Code:			
_____ (Signature)							_____ (Date)			
							Phone Number:   212-637-4133			
							FAX Number:			
							Phone Number:   202-566-0369			
							FAX Number:			
							Phone Number:   513-487-2352			
							FAX Number:			

**PERFORMANCE WORK STATEMENT  
CONTRACT EP-C-16-003  
WORK ASSIGNMENT 1-21**

**TITLE:** U.S. EPA Region 2 NPDES Program Support

**WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE (WACOR):**

<b>COR Name:</b> Sieglinde Pylypchuk  <b>Phone:</b> 212-637-4133 <b>Email:</b> <a href="mailto:pylypchuk.sieglinde@epa.gov">pylypchuk.sieglinde@epa.gov</a>	<b><u>USPS Mailing Address</u></b> Clean Water Division U.S. Environmental Protection Agency, Region 2 290 Broadway New York, NY 10007
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**ALTERNATE WORK ASSIGNMENT CONTRACTING OFFICER'S  
REPRESENTATIVE (AWACOR):**

<b>COR Name:</b> Maureen Krudner  <b>Phone:</b> 212-637-3874 <b>Email:</b> <a href="mailto:krudner.maureen@epa.gov">krudner.maureen@epa.gov</a>	<b><u>USPS Mailing Address</u></b> Clean Water Division U.S. Environmental Protection Agency, Region 2 290 Broadway New York, NY 10007
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**PERIOD OF PERFORMANCE:** September 20, 2017 through June 30, 2018

**ESTIMATED LEVEL OF EFFORT (LOE):** 140 hours

**BACKGROUND:** National Pollutant Discharge Elimination System (NPDES) permits in the Commonwealth of Puerto Rico are issued by the U.S. Environmental Protection Agency (EPA) Region 2. In New Jersey and New York, the NPDES program is implemented by the state through a State Pollutant Discharge Elimination System (SPDES) program managed by the State of New Jersey Department of Environmental Protection and the New York State Department of Environmental Conservation, respectively. In the U.S. Virgin Islands, the NPDES program is implemented by the territory through a Territorial Pollutant Discharge Elimination System (TPDES) program managed by the U.S. Virgin Islands Department of Planning and Natural Resources. EPA Region 2 works closely with the state SPDES and TPDES programs to ensure program integrity and provided technical assistance. Through the completion of the Tasks described in this Work Assignment, EPA Region 2 will be able to provide more effective oversight and technical assistance to state programs.

**PURPOSE AND OBJECTIVE**

During the period of performance, the contractor, under this Work Assignment, will provide NPDES program support to EPA Region 2 for SPDES program support in New York. The contractor will ensure compliance with Agency standards.

## SCOPE OF WORK

### TASK 0: WORK ASSIGNMENT MANAGEMENT

The contractor shall routinely provide performance updates, estimated costs, level of effort (LOE) and key deliverables upon request from EPA's Work Assignment Contracting Officer's Representative (WACOR) and/or Alternative WACOR for all ongoing tasks. Regularly scheduled bi-weekly conference calls and in-person meetings, as needed, will be coordinated between EPA's WACOR and the contractor to discuss the work assignment and progress of tasks. In addition, the contractor shall provide a monthly progress report that includes implementation plan(s); issues encountered and lessons learned regarding the progress of all tasks, the tracking of expenditures, and any other administrative activities, as requested.

**Deliverables:** The contractor shall provide a monthly progress report that will include a description of the work completed during the month. The contractor shall maintain a cumulative list of all technical directives. The contractor shall report in accordance with Contract Reporting Requirements.

### TASK 1: New York State Department of Environmental Conservation State Pollutant Discharge Elimination System Permit Writers' Manual.

*The Contractor shall provide technical review and administrative support on the draft New York State Department of Environmental Conservation SPDES Permit Writers' Manual.*

The New York State Department of Environmental Conservation (NYSDEC) SPDES Permit Writers' Manual is currently in draft form. The purpose of the manual is to create a comprehensive document to guide NYSDEC staff through the process of drafting a SPDES permit that complies with both federal and state regulations and guidance. The manual is planned to replace the following NYSDEC Technical and Operational Guidance Series<sup>1</sup> documents:

- TOGS 1.2.1 – Industrial Permit Writing, February 1998 Edition,
- TOGS 1.2.2 – Administrative Procedures and the Environmental Benefit Permit Strategy for Individual SPDES Permits, January 2012 Edition,
- TOGS 1.2.4 – Individual Sewage Treatment System Discharges to Surface Waters, October 1990 Edition,
- TOGS 1.3.1<sup>2</sup> - Total Maximum Daily Loads & Water Quality-Based Effluent Limitations, February 1998 Edition,
- TOGS 1.3.1A – Amendment – Organic Substances, July 1996 Edition,
- TOGS 1.3.1B – Amendment – Low and Intermittent Flow Streams, July 1996 Edition,
- TOGS 1.3.1C – Amendment – Metals, July 1996 Edition,
- TOGS 1.3.1D – Amendment – Waste Assimilation Capacity Determinations for Isolated Wastewater Discharges in Fresh Streams, July 1996 Edition,

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<sup>1</sup> NYSDEC's TOGS are available at <http://www.dec.ny.gov/regulations/2652.html>

<sup>2</sup> Pages 1-3 of this existing TOGS were not incorporated into this document, as they are not directly related to the development of SPDES permits, rather to the development of TMDL's.

- TOGS 1.3.1E – Amendment – Permit Limit Development for Certain Parameters, July 1996 Edition,
- TOGS 1.3.2 – Acute and Chronic Toxicity Testing in the SPDES Permit Program, January 2008 Edition,
- TOGS 1.3.3 – SPDES Permit Development for POTWs, February 1998 Edition,
- TOGS 1.3.5 – Waste Assimilation Capacity Determinations for Isolated Wastewater Discharges in Fresh Water Streams, October 1990 Edition,
- TOGS 1.3.6 – Phosphorous Removal Requirements for Waste Water Discharges to Lake and Lake Watersheds, December 1988 Edition, and
- TOGS 1.3.7 – Analytical Detectability & Quantitation Guidelines for Selected Environmental Parameters, July 1990 Edition.

The initial skeleton of the document was developed by Tetra Tech, under an EPA contract and in close partnership with NYSDEC, and was modeled after the 2010 EPA NPDES Permit Writers' Manual<sup>3</sup>. Since Tetra Tech's involvement, NYSDEC has made extensive edits to address outdated policies, incorporate additional guidance, and further customize the manual to meet their specific needs. The next steps, which the Contractor will assist with, are technical review and administrative support.

The Contractor shall provide technical review on the NYSDEC SPDES Permit Writers' Manual which must include a preliminary review of the content of the manual to ensure clarity, consistency, and confirmation with EPA regulation and guidance. This review should prioritize the following chapters in this order:

- Chapter 6 – Water Quality-Based Effluent Limitations (~84 pages)
- Chapter 5 – Technology-Based Effluent Limitations (~50 pages)
- Chapter 9 – Special Conditions (~21 pages)
- Chapter 7 – Final Effluent Limitations and Anti-Backsliding (~5 pages)
- Chapter 8 – Monitoring and Reporting Conditions (~14 pages)

Review of the remaining chapters (full document is ~297 pages) will be determined based on the Level of Effort remaining once the priority chapter review has been completed. The Contractor will coordinate closely with EPA R2 and NYSDEC regarding the technical review and administrative support.

The Contractor shall provide administrative support on the NYSDEC SPDES Permit Writers' Manual. The administrative support should include, but not be limited to:

- Re-numbering, -formatting, -labeling, -referencing the document to make the document accurate following the deletion of the Chapter 4 placeholder,
- Create a chart and exhibit Table of Contents,
- Update hyperlink references as needed, and
- Ensure the formatting of text size, fonts, page numbers, examples, etc. is consistent throughout the document.

**Deliverables:** The contractor shall participate in regular tele- or web-meetings with EPA and/or NYSDEC, prepare meeting notes and provide those notes to EPA R2 within 3 business days of

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<sup>3</sup> Available at: <https://www.epa.gov/npdes/npdes-permit-writers-manual>

the call. The final deliverable of the NYSDEC Permit Writers' Manual shall be submitted no later than June 30, 2018, as an electronic Word document.

### **DELIVERABLES REQUIRED AND SCHEDULE FOR COMPLETION OF TASKS**

<b>Task</b>	<b>Item Require</b>	<b>Due Date</b>	<b>Number of Copies and Format Requirements</b>
0	Monthly progress report	Last week day of each month	Electronic, Word Format or PDF
1	Participate in regular tele- or web-meetings with EPA R2 and NYSDEC to discuss technical and administrative edits and provide meeting notes to EPA R2	Submit meeting notes with 3 working days of the meeting	Electronic, Word format
1	Submit the final deliverable of the NYSDEC SPDES Permit Writers' Manual	No later than June 30, 2018	Electronic, Word format

The Contractor shall notify the CO and WACOR in writing when 75% of the authorized work assignment LOE/labor hours have been expended.

### **CONTRACT PWS REFERENCE**

See Contract Performance Work Statement, Task 3.1, page 3 of 28.

### **ANTICIPATED TRAVEL REQUIREMENTS**

This Work Assignment does not include any travel.

### **ADDITIONAL REQUIREMENTS**

Office direct costs (ODCs) for copying, postage/courier, supplies, computer usage, and graphics are allowed. No other ODCs are allowable as a direct charge to this delivery order without the prior written approval of the Contracting Officer.

Upon issuance of written technical direction, the Contractor shall submit for inspection of all work in progress at any time under this work assignment. The Contractor shall develop and maintain files supporting each task.

The contractor shall contact the Contracting Officer (CO) and/or the CL-COR by telephone to discuss any problems that may adversely affect the work on this Work Assignment. Within five (5) calendar days the contractor shall follow the phone call with a brief written explanation of the problem, including any actions already taken, and/or recommended solutions to correct the problem. Written explanation shall be made available to the CO and the PO.

## **CONTRACTOR IDENTIFICATION**

To avoid any perception that contractor personnel are EPA employees, the contractor shall assure that contractor personnel are clearly identified as independent contractors of EPA when attending meetings with outside parties or visiting field sites.

## **CONTROL REQUIREMENTS**

### Quality Assurance Project Plan (QAPP):

Publishing on the NPDES website does not require a QAPP, since the people who generate the data are responsible for the data's quality, and it is their responsibility to develop a QAPP, if one is needed for their primary data uses. The contractor shall provide source references for data that is published on the website.

### Organizational Conflict of Interest:

The Contractor shall warrant that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the contractor has disclosed all such relevant information. See contract clause 1552.209-71 Organization of Conflict of Interest.

### Notification of Conflicts of Interest Regarding Personnel:

The Contractor shall immediately notify the CL-COR and the Contracting Officer of (1) any actual or potential personal conflict of interest with regard to any of its employees working on or having access to information regarding this contract, or (2) any such conflicts concerning subcontractor employees or consultants working on or having access to information regarding the contract, when such conflicts have been reported to the Contractor. A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. See Section H.4, contract clause EPAAR 1552.209-73 Notification of Conflict of Interest.

### Enforcement Sensitive Information:

The contractor recognizes that contractor employees in performing tasks specified by this WA may have access to data/information, either provided by the government or first generated during contract performance, of enforcement sensitive nature which should not be released to the public without Environmental Protection Agency (EPA) approval. Enforcement sensitive refers to records or information compiled for law enforcement purposes (whether administrative, civil or criminal), the disclosure of which could reasonably be expected to interfere with the enforcement action. It is imperative that all contractor personnel, including but not limited to, subcontractor and consultant personnel assigned to work on this contract and/or WA, or with access to materials developed pursuant to such efforts, understand that this information is confidential and any disclosure or misuse of the information may result in prosecution to the fullest extent of the law. All contractor personnel are expected to exercise due diligence in safeguarding, handling or disposing of any such information.

### Project Employee Confidentiality Agreement

The contractor agrees that the contractor employee will not disclose, either in whole or in part, to any entity external to the EPA, the Department of Justice, or the contractor, any information or data (as defined in FAR Section 27.401) provided by the government or first generated by the contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the EPA CL-COR. If a contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the contractor must provide immediate advance notification to the EPA so that the EPA can take action to prevent such disclosure. Such agreements shall be effective for the life and for a period of five (5) years after completion of the contract.

### Handling of Confidential Business Information (CBI)

Contractor's access to TSCA CBI must comply with the procedures set forth in the TSCA CBI Security Manual. Likewise, access to FIFRA CBI shall follow the security procedures set forth in the FIFRA Information Security Manual.

To the extent that the work under this contract requires access to proprietary or confidential business or financial data of other companies, and as long as such data remains proprietary or confidential, the contractor shall protect such data from unauthorized use and disclosure.

All files or other information identified as Confidential Business Information (CBI) shall be treated as confidential and kept in a secure area with access limited to only contractor personnel directly involved in the case or special project assignment. The contractor, subcontractor, and consultant personnel are bound by the requirements and sanctions contained in their contracts with the EPA and in EPA's confidentiality regulations found at 40 CFR Part 2, Subpart B. The contractor subcontractors, and consultant must adhere to EPA-approved security plans which describes procedures to protect CBI, and are required to sign non-disclosure agreements before gaining access to CBI.

All official data, findings, and results of investigations and studies completed by the contractor shall be available for EPA and DOJ internal use only. The contractor shall not release any part of such data without the written direction of the WACOR.

### Conference/Meeting Guidelines and Limitations

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

## PERFORMANCE SURVEILLANCE PLAN

Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<p><b>Management and Communications:</b></p> <p>During the life of this work assignment, the Contractor shall notify EPA immediately of any issues that may impact the timeliness of deliverables of the problems associated with the development of deliverables.</p>	<p>The Contractor shall maintain contact with the WACOR throughout the performance of the work assignment.</p> <p>The contractor shall identify to the WACOR any delays with regard to deliverables not less than one week prior to the deliverable date that has been established in the work assignment or technical direction document.</p> <p>The contractor shall identify to the WACOR any issues or concerns that have a direct impact on project schedules within three (3) days of occurrence.</p> <p>The contractor shall provide options for EPA's consideration on resolving or mitigating the impacts identified.</p>	<p>WACOR and CL-COR (as necessary) will allocate the time needed to discuss and address all issues identified by the Contractor. The WACOR and CL-COR will document and maintain a complete record of the issues, agreements and outcome. The WACOR and CL-COR will review monthly progress reports for indicators of problems not previously mentioned. The WACOR will also monitor the timely receipt of deliverables. For those that are late without prior notice, the EPA will formally document to the Contracting Officer the late delivery.</p>	<p>If the contractor fails to implement corrective actions after EPA identifies and provided written documentation of performance issues, EPA will rate this performance category "unsatisfactory."</p> <p>If three or more the active work assignments for the period are rated unsatisfactory, EPA will rate the Business Relations category as unsatisfactory in the CPARS Contract Performance System.</p>
<p><b>Cost Management and Control:</b></p> <p>The Contractor shall perform all work in an efficient and cost effective manner, applying cost control measures where practical.</p>	<p>The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through monthly progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks. The contractor should not exceed established work assignment ceilings and, in general, should expend dollars and hours at</p>	<p>The EPA CL-COR will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment level expenditures.</p> <p>The EPA CL-COR and WACOR shall review the Contractor's monthly progress reports and request the Work Assignment Contracting Officer's Representative to ensure that</p>	<p>EPA will thoroughly review work assignment funding ceiling overruns to determine the contractor's ability to control the situation. If EPA determines that the contractor failed to control cost, the contractor will be rated "unsatisfactory" in this category.</p> <p>Multiple incidents of work assignment overrun that result in an overall cost overrun of greater than 4% of the approved total work assignment funding for the current contract period, will result in an</p>



	similar ratios. If either the expenditure of hours or dollars deviates significantly, the contractor shall provide an explanation in its Monthly Progress Report.	ceilings are not exceeded, that progress is being made, and that the contractor is effectively utilizing the LOE provided under the work assignment.	unsatisfactory rating in the CPARS Contract Performance System.
<b>Quality of Product/Services:</b>  The contractor shall ensure documents developed under this task order are quality products that are factual and based on sound science and engineering principles.	Products delivered under this work assignment must not contain any major factual errors. The analyses provided in each product shall be logical, consistent, and defensible.	The WACOR will review all documents delivered under this work assignment for content accuracy.	If EPA determines that the contractor's analyses is factually inaccurate or if significant technical errors are found in any documents produced by the contractor, EPA may determine that the cost associated with redoing the work shall be borne by the contractor.  Multiple incidents of this nature under the contract will result in an unsatisfactory rating for Quality and Manage Control being reported to the CPARS Contract Performance System.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>		Work Assignment Number 1-22								
		<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:								
Contract Number EP-C-16-003		Contract Period   07/01/2016   To   06/30/2018 Base                      Option Period Number       1								
Contractor EASTERN RESEARCH GROUP, INC.		Title of Work Assignment/SF Site Name NPDES ICR Support								
Contractor EASTERN RESEARCH GROUP, INC.		Specify Section and paragraph of Contract SOW See PWS								
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval		Period of Performance  From   07/01/2017   To   06/30/2018								
Comments: No work shall commence on this Work Assignment until July 1, 2017.										
<input type="checkbox"/> Superfund		Accounting and Appropriations Data								
		<input checked="" type="checkbox"/> Non-Superfund								
SFO <input type="checkbox"/> (Max 2)		Note: To report additional accounting and appropriations date use EPA Form 1900-69A.								
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
07/01/2016 To 06/30/2018										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee		LOE:				
Cumulative Approved:				Cost/Fee		LOE:				
Work Assignment Manager Name    Amelia Letnes						Branch/Mail Code:				
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Phone Number: 202-564-5627				
						FAX Number:				
Project Officer Name    Tangela Cooper						Branch/Mail Code:				
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Phone Number: 202-566-0369				
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Other Agency Official Name						Branch/Mail Code:				
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						FAX Number:				
Contracting Official Name    Brad Heath						Branch/Mail Code:				
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Phone Number: 513-487-2352				
						FAX Number:				

**PERFORMANCE WORK STATEMENT  
CONTRACT EP-C-16-003  
WORK ASSIGNMENT 1-22**

**Title:** Support for NPDES Data Collection and Information Management

**Work Assignment Contracting Officer's Representative (WACOR):**

<b>Amelia Letnes</b> Phone: (202) 564-5627 Fax (202) 564-9544 Letnes.amelia@epa.gov	<b><u>USPS Mailing Address</u></b> Water Permits Division 1200 Pennsylvania Ave., NW Mail Code 4203M Washington, DC 20460	<b><u>Courier Address</u></b> EPA East Building 1201 Constitution Ave., NW Room 7135D Washington, DC 20004
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**Period of Performance:** July 1, 2017 through June 30, 2018

**Background:** Under the Paperwork Reduction Act (PRA) of 1995, the Agency is required to obtain Office of Management and Budget (OMB) approval before it can request the public to submit information or retain records, be it via paper or electronically. The package of materials describing an information collection that is submitted by the Agency to OMB is called an "Information Collection Request" or "ICR." Any monitoring, reporting, or record keeping requirement imposed on non-federal respondents by EPA will require an ICR. When an ICR is needed, it is subject to OMB review and approval regardless of whether the information is collected voluntarily, or is required to receive a grant or a benefit. Often, the information collection effort is aided by the use of OMB-approved forms associated with the ICR. As with all information collection activities, EPA must routinely evaluate its forms and make modifications as necessary to reflect current responsibilities and identify opportunities to streamline information collection efforts. Preparing an ICR requires that EPA estimate the burden incurred by respondents and the Agency for collecting, reporting, and maintaining the necessary information.

EPA has a working draft NPDES ICR that covers all NPDES data collection. This is a new consolidation of multiple existing ICRs, and also changed format from the EPA template to the OMB template. EPA will provide the contractor with the consolidated ICR and supporting documentation as well as any of the previous ICRs needed for the work.

**Scope of Work:**

This work assignment provides for support to the Water Permits Division to address ongoing data collection needs as well as to begin to resolve information management challenges. The Contractor shall provide technical support to EPA under the tasks described below. Support under the work assignment may require the Contractor to perform on a rapid response, quick turn-around basis.

The document has been drafted and is ready for first public notice, but still requires a copy edit and may require other specific fixes. The contractor will also support EPA in finalizing the ICR, including preparing the data for entry into the data system as well as drafting a response to

comments document as necessary.

### **Task 1: Finalize Draft ICR**

EPA has a draft consolidated ICR that is ready for first public notice. The following ICRs have been included in the consolidated ICR:

<b>ICR Number</b>	<b>Title</b>	<b>Expiration</b>
2040-0250	Consolidated Animal Sectors ICR	05/31/2019
2040-0284	Pesticides General Permit ICR	03/31/2019
2040-0241	Cooling Water Intake Structures - New Facility	11/30/2019
2040-0004	Consolidated NPDES ICR	12/31/2017
2040-0009	National Pretreatment Program: Streamlining Final Rule	04/30/2019
2040-0257	Cooling Water Intake Structures Existing Facility (Phase II)	10/31/2017
2040-0268	Cooling Water Intake Structures at Phase III Facilities	07/31/2017
N/A	Steam-Electric ELG	N/A
N/A	E-Reporting Rulemaking	N/A

Activities under this WA include:

1. Respond to EPA comments on draft ICR documents and revise as necessary
2. Revise draft Federal Register notice as necessary based on edits to ICR document
3. Prepare draft responses to public comments on the draft supporting statement
4. Prepare final ICR(s) supporting statements
5. Prepare materials for submission to OMB

#### *Task 1 Deliverables:*

Revised document including copy edit and any necessary updates – 7/15/17

Response to public comments – 2 weeks after end of public notice period

Final document for OMB submission – 3 weeks after end of public notice period

#### *Level of Effort:*

EPA estimates 50 hours for this task

### **Task 2: Quality Assurance Project Plan**

**QAPP Requirement.** EPA requires that all environmental data used in decision making be supported by an approved Quality Assurance Project Plan (QAPP). The following deliverables may contain environmental data: ICRs with estimated costs and burdens, documents associated with ICR development (e.g., ICR supporting statements, EPA response to EPA and public comments on the draft ICRs, Form 83-1, action memos, fact sheets, consolidated ICR plans) outlines of information and issues (such as data gaps) to be addressed, and additional deliverables specified in technical directives. If these deliverables do contain environmental data, a QAPP is required to describe the /contractor's plan for assuring the quality of these data over their life cycle. The contractor may begin work on data-related activities (e.g., data generation, data management, data distribution, or data use) described in Tasks 1 of this work assignment pending QAPP approval. All data-related activities shall be conducted in accordance with the Office of Water Quality Management Plan

(QMP).

*Task 2 deliverables:* The contractor should submit the updated QAPP within 30 days of the receipt of this work assignment. The contractor should confer with the WACOR and QA Coordinator to discuss updating the QAPP should any questions or need for clarification arise. Monthly progress reports should describe (a) the contractor's progress on implementing the QAPP and resolving old data quality issues, and (b) any new issues.

## **OTHER REQUIREMENTS**

### Reporting

*Progress* Reports shall be submitted in accordance with the reporting requirements of the contract. In addition, the contractor shall maintain contact with the WACOR to advise of progress and problems. All documents shall be delivered in Word, Excel, HTML, and/or PDF format, as requested by the WACOR. The contractor shall notify the EPA immediately when expenditures of 75% and 90% of the work assignment LOE or funding (including pipeline costs) are reached.

The contractor shall be prepared to submit for inspection copies of all work in progress any time as requested by the WACOR. The contractor shall not release information or comments on works performed under this work assignment without the WACOR's prior written authorization. Wherever practicable, all written materials submitted to EPA must be doubled-sided and on recycled paper. All computer disks submitted to the WACOR shall be scanned for, and identified as free from viruses.

### Travel

No travel other than local travel is expected under this work assignment.

### Conference/Meeting Guidelines and Limitations

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-22				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-16-003			Contract Period   07/01/2016   To   06/30/2018 Base                      Option Period Number      1			Title of Work Assignment/SF Site Name NPDES ICR Support				
Contractor EASTERN RESEARCH GROUP, INC.					Specify Section and paragraph of Contract SOW See PWS					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   09/12/2017   To   06/30/2018					
Comments: The purpose of this Amendment 1 is to ADD Jennifer Chan (Phone: 202-564-3067; Fax: 202-564-6384; E-mail: chan.jennifer@epa.gov) as the Alternate Work Assignment Contracting Officer's Representative (AWACOR).										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations data use EPA Form 1900-69A. (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
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Contract Period:                      Cost/Fee:                      LOE: 07/01/2016   To   06/30/2018										
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Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:                      Cost/Fee                      LOE:										
Cumulative Approved:                      Cost/Fee                      LOE:										
Work Assignment Manager Name    Amelia Letnes  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-5627 FAX Number:			
Project Officer Name    Tangela Cooper  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-566-0369 FAX Number:			
Other Agency Official Name  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name    Brad Heath <div style="display: flex; justify-content: space-between;"> <div>             _____            (Signature)         </div> <div>           9/12/2017            _____            (Date)         </div> </div>							Branch/Mail Code: Phone Number: 513-487-2352 FAX Number:			

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>		Work Assignment Number 1-23								
		<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:								
Contract Number EP-C-16-003	Contract Period 07/01/2016 To 06/30/2021 Base                      Option Period Number 1	Title of Work Assignment/SF Site Name Vessel Discharge Management								
Contractor EASTERN RESEARCH GROUP, INC.		Specify Section and paragraph of Contract SOW See PWS								
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval		Period of Performance  From 09/06/2017 To 06/30/2018								
Comments:										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> (Max 2)                      Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
07/01/2016 To 06/30/2021										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee				LOE:		
Cumulative Approved:				Cost/Fee				LOE:		
Work Assignment Manager Name Jack Faulk							Branch/Mail Code:			
_____ (Signature)							_____ (Date)			
Project Officer Name Tangela Cooper							Phone Number: 202-564-0768			
_____ (Signature)							_____ (Date)			
Other Agency Official Name							FAX Number:			
_____ (Signature)							_____ (Date)			
Contracting Official Name Brad Heath							Branch/Mail Code:			
_____ (Signature)							_____ (Date)			
9/6/2017							Phone Number: 513-487-2352			
_____ (Signature)							_____ (Date)			
							FAX Number:			

**PERFORMANCE WORK STATEMENT  
CONTRACT EP-C-16-003  
WORK ASSIGNMENT 1-23**

**TITLE:** Vessel Discharge Management

**WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE (WACOR):**

	<b><u>USPS Mailing Address</u></b>	<b><u>Courier Address</u></b>
Jack Faulk Phone: 202-564-0768 Fax: 202-564-6392 <a href="mailto:faulk.jack@epa.gov">faulk.jack@epa.gov</a>	US EPA Mail Code 4203M 1200 Pennsylvania Ave, NW Washington, DC 20460	US EPA Room 7329F 1201 Constitution Ave, NW Washington, DC 20001

**PERIOD OF PERFORMANCE:** September 6, 2017 through June 30, 2018

**BACKGROUND:** Due to a 2006 court order, EPA began permitting incidental vessel discharges from many vessels on February 6, 2009. The 2008 and 2013 Vessel General Permit (VGP) regulates discharges incidental to the normal operation of vessels operating in a capacity as a means of transportation. The VGP includes general effluent limits applicable to all discharges; general effluent limits applicable to 27 specific discharge streams; narrative water-quality based effluent limits; inspection, monitoring, recordkeeping, and reporting requirements; and additional requirements applicable to certain vessel types.

On July 31, 2008, Senate bill S. 3298 was signed into law (P.L. No. 110-299). This law generally imposes a two-year moratorium during which time neither EPA nor states can require NPDES permits for discharges incidental to the normal operation of commercial fishing vessels and other non-recreational vessels less than 79 feet. Among other things, the moratorium does not apply to ballast water. P.L. 110-299 also directed EPA to conduct a study of vessel discharges and issue a report to Congress. This report was finalized in August 2010. The moratorium for these vessels was extended to December 2014 and then again to December 2017.

In September 2014, EPA promulgated the 2013 Small Vessel General Permit (sVGP) to cover those vessels in the event the moratorium is not extended.

**PURPOSE AND OBJECTIVE:** The purpose of this work assignment is to support EPA's National Pollutant Discharge Elimination System (NPDES) vessel permitting program. Under this work assignment, the Contractor shall provide technical support to EPA Office of Wastewater Management (OWM) Water Permits Division (WPD) to develop technical materials for EPA's use in implementing the vessel general discharge management programs. The support shall focus primarily on developing background and supporting information for EPA's vessel permitting program, conducting research for vessel related discharge issues, and developing and providing outreach to affected stakeholders. The Contractor shall provide support to EPA with the following tasks:



- Develop a work plan and provide monthly progress reports;
- Provide quality assurance, including developing a Supplemental Quality Assurance Project Plan (SQAPP), as necessary to cover work under this work assignment;
- Provide research and technical support for EPA's vessel permitting program, including development of technical development documents on specific topics (e.g., ballast water management);
- Support development of draft/final VGP/sVGP documentation as part of the permit issuance process;
- Provide technical support implementing EPA's obligations as a result of the successful Endangered Species Act (ESA) consultation for the sVGP and VGP; and
- Support implementation and outreach for the VGP and sVGP and other vessel-related program activities.

## **SCOPE OF WORK – (Total LOE – 4,000 hours)**

### **TASK 0: WORK ASSIGNMENT MANAGEMENT (*Task 1 under Contract EP-C-12-021, WA 4-53*)**

The Contractor will prepare and submit a work plan and cost estimate for all tasks of the work assignment within 30 calendar days of receipt of the WA. The work plan shall present the technical approach by task, including any assumptions used for the approach; the project schedule and deliverables; staffing details; level of effort by task, staff member, and professional labor mix; and the estimated cost. Also, the Contractor will respond to any requests and technical directives from the WACOR within 5 business days or as otherwise specified in the request or technical directive.

Regularly scheduled bi-weekly conference calls and in-person meetings, as needed, will be coordinated between EPA's WACOR and the Contractor to discuss the work assignment and progress of tasks. The Contractor shall provide electronic copies of the monthly progress reports to the EPA Project Officer (PO), WACOR, and alternate WACOR. Each progress report shall describe the technical work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties.

The Contractor shall immediately notify the WACOR by telephone of any problems that may impede performance, along with any corrective actions needed to solve the problems. The Contractor shall notify the CO and WACOR in writing when 75% of the authorized work assignment LOE/labor hours have been expended.

In addition, the Contractor shall provide an accountability report about how and whether the activities/reports in this work assignment have furthered EPA's goals toward protecting the Great Lakes from invasive species (e.g., a short description of how funds were used for both this and previous contract periods, how much was spent on each subtask, and why the work is directly relevant to the goal of preventing the introduction of new invasive species to the Great Lakes and slowing their dispersal pathways in those water bodies).

## **TASK 1: QUALITY ASSURANCE (*Task 2 under Contract EP-C-12-021, WA 4-53*)**

Quality Assurance Project Plans are required under the Agency's Quality Assurance Policy CIO-2105, formerly EPA Order 5360.1A2 and implementing guidance CIO-2105-P-01-0. All projects that involve the generation, collection, analysis and use of environmental data must have an approved QAPP to assure the quality, objectivity, integrity and utility of the data and information used in the project.

### *QA Project Plan Requirements*

EPA policy requires that an approved Quality Assurance Project Plan (QAPP) or programmatic Quality Assurance Project Plan (p-QAPP) be in place for work that involves the collection, generation, evaluation, analysis or use of primary environmental data. The QAPP or p-QAPP defines and documents how specific data generation and collection activities shall be planned, implemented, and assessed during a particular project. This contract has an approved p-QAPP for all necessary work envisioned under this work assignment.

The Contractor shall adhere to the approved p-QAPP when generating, collecting and determining the use of data and information for any applicable task under this work assignment. If any work required under this work assignment is not covered under the p-QAPP, the Contractor shall prepare a supplemental QAPP (s-QAPP) for those tasks.

## **TASK 2: TECHNICAL AND IMPLEMENTATION SUPPORT TO EPA'S VESSEL GENERAL PERMIT PROGRAM (*Task 5 under Contract EP-C-12-021, WA 4-53*)**

The Contractor shall support EPA's development of technical and factual materials for EPA use in implementing the Vessel General Permitting Program. Work may include literature reviews, developing background materials, researching technologies, and working with industry experts and government officials to develop a solid foundation for instituting national permit effluent limits and other conditions.

### *Subtask 2A: Update and Develop TDDs*

The Contractor shall support the development of technical development documents (TDDs), in addition to the TDD identified in Task 3, including work on documents started and/or completed under previous work assignments. EPA expects these efforts to include technical memoranda (plus appendices with relevant data) describing the sources of information, key findings from those sources, technological capabilities and efficacy, cost information where relevant, and what conclusions, if any, can be drawn from this information. Once final, these TDDs shall be of sufficient quality to place in the docket and serve as part of the administrative record for decision-making. Subject areas which may be researched include, but will not be limited to:

- Monitoring approaches to assess vessel discharges
- Technical feasibility of using environmental acceptable lubricants on vessels, including the extent to which vessels have converted to these applications as a result of VGP/sVGP requirements.
- Use of exhaust gas cleaning systems to control sulfur emissions

- Other discharge types and treatment options as necessary.

Unless otherwise specified in the technical direction from the WACOR, within 1 week of receiving written technical direction to proceed on a TDD, the Contractor shall submit an annotated outline of the TDD and appendices identifying the information, conceptual approaches, and analyses, and scope of issues to be addressed in the technical memorandum. After approval by the WACOR, the Contractor shall prepare and submit a draft version of the TDD within 1 month and respond to EPA within 1 week and submit the final TDD within 2 weeks of receiving technical comments from the WACOR. EPA estimates that one TDD approximately 25-50 pages in length to be developed as part of this task.

#### Subtask 2B:

The Contractor shall support issuance/reissuance/modification of EPA's vessel general permits consistent with any technical direction provided by the WACOR and may include support to:

- Collect and compile information and develop analyses, studies, and other supporting documentation;
- Draft and format the permit, fact sheet, and other permit documents;
- Prepare documents necessary for Endangered Species Act (ESA) consultation;
- Economic and benefits analyses to examine the market and non-market impacts from permit issuance;
- Comment response categorization, entry into a comment response database, draft responses to comments, and prepare the response document; and
- Compile a permit docket.

This work shall build off existing permit documents and analyses prepared for previous permits taking into account any revisions to those permits as well as any changes in other considerations that affect such analyses.

### **Task 3: Ballast Water Management Evaluation (*Subtask 3a under Contract EP-C-12-021, WA 4-53*)**

Managing the discharge of ballast water is a critical component of aquatic nuisance species control. This task includes completion of a technical development document, started under a previous work assignment assessing the state of ballast water management systems for vessels that transit into freshwater as well as marine ecosystems, including options available for both existing and new vessels. This assessment will investigate the full range of ballast water management system (BWMS) options, including activities such as best management practices, ballast water exchange, and treatment. Both on-ship and off-ship (e.g., on-shore) ballast water treatment systems options will be considered for the full range of domestic and international vessels covered under EPA's Vessel General Permit (VGP) as well as vessels less than 79 feet in length that may otherwise be covered under EPA's Small Vessel General Permit (sVGP). The report will provide BWMS options for both inland and marine vessels, including vessel activities in the Great Lakes (i.e., pre- and post-2009 Lakers and other vessels traversing the Great Lakes).

The assessment will consider biological effectiveness, cost, logistics, operations, regulatory

implications, safety, and any other areas that may affect ballast water management, including challenges presented by freshwater ecosystems. The assessment will look at both shipboard treatment and off-ship reception facilities to determine the availability and economic and logistical feasibility of these two options for the treatment of ballast water from the different categories/classes of vessels. Specifically, this assessment will consider if onshore treatment or other off-ship treatment, such as on a treatment barge, are reasonable, or preferred, alternatives to shipboard treatment for any universe of vessels covered under the VGP, including an assessment of the time necessary to implement such an approach if such is found to be a reasonable alternative. Unique characteristics of classes/categories of vessels will be considered in context with BWMS options to determine whether specific management/treatment options are “available” for these vessels considering the unique operational and design constraints of such vessels (e.g., large volumes of fresh cold water required and the short duration of trips for Lakers). This assessment will also evaluate Lakers built after 2009 since these vessels face many of the same challenges and constraints as pre-2009 Lakers. As appropriate, this assessment will evaluate a variety of environmental (e.g., temperature and salinity), operational (e.g., ballasting flow rates and holding times), and vessel design (e.g., ballast volume and unmanned barges) parameters to consider in determining applicable discharge requirements. The outline for this document is as follows:

1. Introduction
2. Ballast Water Regulations/Requirements to Prevent ANS Introduction and Propagation
3. Vessel Universe
4. Best Management Practices
5. Ballast Water Treatment Principles
6. Type Approved Ballast Water Management Systems
7. Ballast Water Management System Costs
8. Ballast Water Management System Performance
9. Compliance Monitoring
10. Assessment of Off-ship Ballast Water Treatment
11. Great Lakes Ballast Water Management Considerations
12. Ballast Water Alternatives

**TASK 4: EVALUATE AQUATIC NUISANCE SPECIES IN THE GREAT LAKES (*Task 4 under Contract EP-C-12-021, WA 4-53*)**

Under a previous work assignment, the Contractor supported the development of an EPA report entitled: “Analysis of Ballast Water Discharges into the Great Lakes from Overseas Vessels from 2010 to 2013” which provides information on ballast water discharges from ocean-going vessels entering the Great Lakes. Information in that report will be useful to assess aquatic nuisance species invasion risks into the Great Lakes by these vessels. Subsequent to that report, the Contractor supported the development of two additional reports, also under a previous work assignment, on (1) interlake transfers of ballast water within the Great Lakes and (2) contributions of ballast water into the Great Lakes from vessels coming from coastal/inland locations. These two reports will provide data and maps, as available, reflecting routes of the full range of vessels into and within the Great Lakes. These reports will also include data regarding the populations, ranges, and environmental characteristics of these ranges (salinity, temperature, etc.) of existing ANS in the Great Lakes. The final reports will describe how interlake transfers and coastal/inland transfers of

ballast water may occur and the routes/vessels/vectors that pose the highest risk for spreading existing ANS, or future ANS that may enter the Great Lakes. Under this Task, the Contractor will finalize these two reports, including responding to any comments from EPA and other selected reviewers as agreed to between the WACOR and the Contractor. Potential follow-up work will include using information identified in this report to develop a suite of strategies or tools to address inter-lake transfer of ANS.

Under this work assignment, the Contractor shall support other analyses of impacts of vessel activities on aquatic nuisance species in the Great Lakes and approaches for reducing these potential impacts. For purposes of this task, the Contractor shall assume preparation of 3 studies to include: (1) assessing how Lakers in the Great Lakes are adopting use of ballast water best management practices, (2) the effects of temperature and pH changes on aquatic nuisance species invasion potential, and (3) assessing options to curb the transport of Viral Hemorrhagic Septicemia (VHS) Virus in Laker ballast water.

**Task 5: SUPPORT IMPLEMENTATION AND OUTREACH FOR THE VESSEL PERMITTING PROGRAM** (*Task 8 under Contract EP-C-12-021, WA 4-53*)

*Subtask 5a: Outreach*

The Contractor shall support the development of materials for implementation and outreach of EPA's vessel permitting program. The Contractor shall prepare technical outreach materials such as 1-2 page factsheets, implementation/compliance checklists, and presentations on permit-specific information, and coordinate/facilitate external stakeholder meetings. The Contractor shall assume development of 2 short implementation fact sheets/checklists. One of those fact sheets may need to be translated into languages of the IMO (French, Spanish, Chinese, Russian, and/or Arabic). The Contractor shall also assume support for 2 online meetings and webinars as requested by the WACOR.

*Subtask 5b: Vessel Discharge Summary Report*

The Contractor shall develop a report that summarizes the characteristics and conditions of vessels and vessel practices, including those that enter freshwater ecosystems, based on information (i.e., from Notices of Intent, Notices of Termination, Vessel One-Time Reports, and Annual Reports) submitted to EPA under both the 2008 and 2013 VGPs. The report will also analyze vessels and vessel activities based on location to the extent possible, such as to identify the types of vessels operating on the Great Lakes and their operational and discharge characteristics.

**DELIVERABLES REQUIRED AND SCHEDULE FOR COMPLETION OF TASKS**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date (to EPA) – unless specified otherwise through written technical direction from the WACOR</b>
0	Work plan and budget	- Within 30 days of receipt of WA
0	Progress/cost reports	- Monthly (Technical and Cost Progress Report)

<b>Task</b>	<b>Deliverable</b>	<b>Due Date (to EPA) – <i>unless specified otherwise through written technical direction from the WACOR</i></b>
0	Response to requests/technical directive	- Within 5 business days unless specified otherwise
0	Problem report	- Immediately upon discovery of a problem
1	Great Lakes Accountability/Relevance Report	- 30 days after WACOR request
1	s-QAPP	- 10 days after notification by the WACOR that an s-QAPP is needed
1	Revisions to s-QAPP based on EPA feedback	- 7 days after receipt of WACOR feedback
1	Final s-QAPP for this WA	- 5 days after WACOR feedback
1	QA Progress Reports	- Monthly, as part of Progress/Cost Reports
2a	Technical Development Documents	<ul style="list-style-type: none"> <li>- Kickoff meeting with EPA to discuss technical direction within 1 week of receipt of technical direction</li> <li>- Outline of product to be provided within 1 week of kickoff meeting</li> <li>- Draft of product within 1 month of approval of outline</li> <li>- Response to EPA comments on documents within 1 week of receipt of comments</li> <li>- Final deliverable within 2 weeks of receipt of EPA comments</li> </ul>
2b	Briefing Materials, Targeted Assessment of Permit Conditions, Technical Memos, Economic and Benefit Analysis, Permit Docket Support, Comment Response Support, etc.	<ul style="list-style-type: none"> <li>- Kickoff meeting with EPA to discuss technical direction within 1 week of receipt of technical direction</li> <li>- Outline of product to be provided within 1 week of kickoff meeting</li> <li>- Draft of product within 1 month of approval of outline</li> <li>- Response to EPA comments on documents within 1 week of receipt of comments</li> <li>- Final deliverable within 2 weeks of receipt of EPA comments</li> </ul>

<b>Task</b>	<b>Deliverable</b>	<b>Due Date (to EPA) – unless specified otherwise through written technical direction from the WACOR</b>
3	Ballast Water Management Technical Development Document	- Draft and final documents based on technical direction from the WACOR
4	Final Great Lakes Interlake Ballast Water Transfer Report	- Revised report within timeframe established by WACOR after receipt of comments
4	Draft Great Lakes Coastal/Inland Ballast Water Transfer Report	- Draft report within timeframe established by WACOR - Revisions within 30 days after receipt of comments from WACOR
4	Final Great Lakes Coastal/Inland Ballast Water Transfer Report	- Within 15 days after receipt of comments from WACOR
4	Great Lakes Invasive Species Studies (3)	- Draft outline within 10 days of technical direction from WACOR - Draft report within timeframe specified by WACOR after acceptance of final outline - Revisions within timeframe specified by WACOR
5a	Online Meeting/Webinar Support	- Registration pages within 1 week after technical direction from WACOR. - Summary reports within 2 weeks after completion of meeting/webinar.
5a	Briefing Materials, Brochures, Fact Sheets, Other Outreach Materials	- Based on technical direction from the WACOR
5b	Draft VGP Summary Report Outline	- Based on technical direction from the WACOR
5b	Revised VGP Summary Report Outline	- 1 week after receipt of comments on Draft Report Outline from WACOR
5b	Draft VGP Summary Report	- 2 months after EPA acceptance of Revised Report Outline
5b	Revised VGP Summary Report	- 2 weeks after receipt of comments from EPA

## CONTRACT PWS REFERENCE

*Contract Number EP-C-16-003, Option Year 1.*

Task 1 – Quality Assurance - PWS Section 4.0

Subtask 2a – Technical Development Documents – PWS Sections 3.8, 5.2, 8.0, and 10.0



Subtask 2b – Permit Revision Support - PWS Sections 3.5, 5.2, 10.0, and 11.0  
Task 3 – Ballast Water Management Evaluation – PWS Sections 3.8, 5.2, 8.0 and 10.0  
Task 4 – Evaluation Reports – PWS Sections 3.8, 8.0, and 10.0.  
Subtask 5a – Outreach - PWS Sections 3.9, 6.0, and 7.0  
Subtask 5b – Data Summary Report – PWS Sections 3.8, 8.0, and 10.0

## **ANTICIPATED TRAVEL REQUIREMENTS**

All travel shall be approved in advance by the Contract-Level Contracting Officer's Representative (CL-COR) and shall be in accordance with the Contract.

## **ADDITIONAL REQUIREMENTS**

Office direct costs (ODCs) for copying, postage/courier, supplies, computer usage, and graphics are allowed. No other ODCs are allowable as a direct charge to this delivery order without the prior written approval of the Contracting Officer.

Upon issuance of written technical direction, the Contractor shall submit for inspection of all work in progress at any time under this work assignment. The Contractor shall develop and maintain files supporting each task.

The Contractor shall contact the Contracting Officer (CO) and/or the CL-CCOR by telephone to discuss any problems that may adversely affect the work on this Work Assignment. Within five (5) calendar days the contractor shall follow the phone call with a brief written explanation of the problem, including any actions already taken, and/or recommended solutions to correct the problem. Written explanation shall be made available to the CO and the PO.

## **CONTRACTOR IDENTIFICATION**

To avoid any perception that contractor personnel are EPA employees, the contractor shall assure that contractor personnel are clearly identified as independent contractors of EPA when attending meetings with outside parties or visiting field sites.

## **CONTROL REQUIREMENTS**

### Quality Assurance Project Plan (QAPP):

Publishing on the NPDES website does not require a QAPP, since the people who generate the data are responsible for the data's quality, and it is their responsibility to develop a QAPP, if one is needed for their primary data uses. The contractor shall provide source references for data that is published on the website.

### Organizational Conflict of Interest:

The Contractor shall warrant that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the contractor has disclosed all such relevant information. See contract clause 1552.209-71 Organization of Conflict of Interest.



#### Notification of Conflicts of Interest Regarding Personnel:

The Contractor shall immediately notify the CL-COR and the Contracting Officer of (1) any actual or potential personal conflict of interest with regard to any of its employees working on or having access to information regarding this contract, or (2) any such conflicts concerning subcontractor employees or consultants working on or having access to information regarding the contract, when such conflicts have been reported to the Contractor. A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. See Section H.4, contract clause EPAAR 1552.209-73 Notification of Conflict of Interest.

#### Enforcement Sensitive Information:

The contractor recognizes that contractor employees in performing tasks specified by this WA may have access to data/information, either provided by the government or first generated during contract performance, of enforcement sensitive nature which should not be released to the public without Environmental Protection Agency (EPA) approval. Enforcement sensitive refers to records or information compiled for law enforcement purposes (whether administrative, civil or criminal), the disclosure of which could reasonably be expected to interfere with the enforcement action. It is imperative that all contractor personnel, including but not limited to, subcontractor and consultant personnel assigned to work on this contract and/or WA, or with access to materials developed pursuant to such efforts, understand that this information is confidential and any disclosure or misuse of the information may result in prosecution to the fullest extent of the law. All contractor personnel are expected to exercise due diligence in safeguarding, handling or disposing of any such information.

#### Project Employee Confidentiality Agreement

The contractor agrees that the contractor employee will not disclose, either in whole or in part, to any entity external to the EPA, the Department of Justice, or the contractor, any information or data (as defined in FAR Section 27.401) provided by the government or first generated by the contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the EPA CL-CPR. If a contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the contractor must provide immediate advance notification to the EPA so that the EPA can take action to prevent such disclosure. Such agreements shall be effective for the life and for a period of five (5) years after completion of the contract.

#### Handling of Confidential Business Information (CBI)

Contractor's access to TSCA CBI must comply with the procedures set forth in the TSCA CBI Security Manual. Likewise, access to FIFRA CBI shall follow the security procedures set forth in the FIFRA Information Security Manual.

To the extent that the work under this contract requires access to proprietary or confidential business or financial data of other companies, and as long as such data remains proprietary or confidential, the contractor shall protect such data from unauthorized use and disclosure.

All files or other information identified as Confidential Business Information (CBI) shall be treated as confidential and kept in a secure area with access limited to only contractor personnel directly involved in the case or special project assignment. The contractor, subcontractor, and consultant personnel are bound by the requirements and sanctions contained in their contracts with the EPA and in EPA's confidentiality regulations found at 40 CFR Part 2, Subpart B. The contractor subcontractors, and consultant must adhere to EPA-approved security plans which describes procedures to protect CBI, and are required to sign non-disclosure agreements before gaining access to CBI.

All official data, findings, and results of investigations and studies completed by the contractor shall be available for EPA and DOJ internal use only. The contractor shall not release any part of such data without the written direction of the WACOR.

#### Conference/Meeting Guidelines and Limitations

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

PERFORMANCE SURVEILLANCE PLAN			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<p><b>Management and Communications:</b></p> <p>During the life of this work assignment, the Contractor shall notify EPA immediately of any issues that may impact the timeliness of deliverables of the problems associated with the development of deliverables.</p>	<p>The Contractor shall maintain contact with the WACOR throughout the performance of the work assignment.</p> <p>The contractor shall identify to the WACOR any delays with regard to deliverables not less than one week prior to the deliverable date that has been established in the work assignment or technical direction document.</p> <p>The contractor shall identify to the WACOR any issues or concerns that have a direct impact on project schedules within three (3) days of occurrence.</p> <p>The contractor shall provide options for EPA's consideration on resolving or mitigating the impacts identified.</p>	<p>WACOR and CL-COR (as necessary) will allocate the time needed to discuss and address all issues identified by the Contractor. The WACOR and CL-COR will document and maintain a complete record of the issues, agreements and outcome. The WACOR and CL-COR will review monthly progress reports for indicators of problems not previously mentioned. The WACOR will also monitor the timely receipt of deliverables. For those that are late without prior notice, the EPA will formally document to the Contracting Officer the late delivery.</p>	<p>If the contractor fails to implement corrective actions after EPA identifies and provided written documentation of performance issues, EPA will rate this performance category "unsatisfactory."</p> <p>If three or more the active work assignments for the period are rated unsatisfactory, EPA will rate the Business Relations category as unsatisfactory in the CPARS Contract Performance System.</p>
<p><b>Cost Management and Control:</b></p> <p>The Contractor shall perform all work in an efficient and cost effective manner, applying cost control measures where practical.</p>	<p>The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through monthly progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks. The contractor should not exceed established work assignment ceilings and, in general, should expend dollars and hours at similar ratios. If either the expenditure of hours or dollars deviates significantly, the contractor shall provide an explanation in its Monthly Progress Report.</p>	<p>The CL-COR will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment level expenditures.</p> <p>The CL-COR and WACOR shall review the Contractor's monthly progress reports and request the Work Assignment Contracting Officer's Representative to ensure that ceilings are not exceeded, that progress is being made, and that the contractor is effectively utilizing the LOE provided under the work assignment.</p>	<p>EPA will thoroughly review work assignment funding ceiling overruns to determine the contractor's ability to control the situation. If EPA determines that the contractor failed to control cost, the contractor will be rated "unsatisfactory" in this category.</p> <p>Multiple incidents of work assignment overrun that result in an overall cost overrun of greater than 4% of the approved total work assignment funding for the current contract period, will result in an unsatisfactory rating in the CPARS Contract Performance System.</p>

<p><b>Quality of Product/Services:</b></p> <p>The contractor shall ensure documents developed under this task order are quality products that are factual and based on sound science and engineering principles.</p>	<p>Products delivered under this work assignment must not contain any major factual errors. The analyses provided in each product shall be logical, consistent, and defensible.</p>	<p>The WACOR will review all documents delivered under this work assignment for content accuracy.</p>	<p>If EPA determines that the contractor's analyses is factually inaccurate or if significant technical errors are found in any documents produced by the contractor, EPA may determine that the cost associated with redoing the work shall be borne by the contractor.</p> <p>Multiple incidents of this nature under the contract will result in an unsatisfactory rating for Quality and Manage Control being reported to the CPARS Contract Performance System.</p>
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<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>						Work Assignment Number 1-23				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-16-003			Contract Period   07/01/2016   To   06/30/2018 Base                      Option Period Number      1			Title of Work Assignment/SF Site Name Vessel Discharge Management				
Contractor EASTERN RESEARCH GROUP, INC.					Specify Section and paragraph of Contract SOW See PWS					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance  From   12/07/2017   To   06/30/2018					
Comments: The purpose of this Amendment 2 is to remove the previously established funding ceiling as this work assignment is now fully funded at \$409,289.00.										
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
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Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
07/01/2016   To   06/30/2018										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:						Cost/Fee		LOE:		
Cumulative Approved:						Cost/Fee		LOE:		
Work Assignment Manager Name    Jack Faulk						Branch/Mail Code:				
_____ (Signature)						_____ (Date)				
Project Officer Name    Tangela Cooper						Branch/Mail Code:				
_____ (Signature)						_____ (Date)				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature)						_____ (Date)				
Contracting Official Name    Brad Heath						Branch/Mail Code:				
_____ (Signature)						_____ (Date)				
						Phone Number:   202-564-0768				
						FAX Number:				
						Phone Number:   202-566-0369				
						FAX Number:				
						Phone Number:   513-487-2352				
						FAX Number:				

<b>EPA</b> United States Environmental Protection Agency Washington, DC 20460 <b>Work Assignment</b>		Work Assignment Number 1-35																																																																		
		<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:																																																																		
Contract Number EP-C-16-003	Contract Period 07/01/2016 To 06/30/2018 Base                      Option Period Number    1	Title of Work Assignment/SF Site Name Phase 2 Mystic River Watershed																																																																		
Contractor EASTERN RESEARCH GROUP, INC.		Specify Section and paragraph of Contract SOW See PWS																																																																		
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval		Period of Performance  From 08/01/2017 To 06/30/2018																																																																		
Comments: The tasks performed under this work assignment and the development of the corresponding work plan shall be coordinated with the WACOR and/or AWACOR.																																																																				
<input type="checkbox"/> Superfund                      Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund																																																																				
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Work Assignment Manager Name    Mark Voorhees  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>		Branch/Mail Code: Phone Number: 617-918-1537 FAX Number:																																																																		
Project Officer Name    Tangela Cooper  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>		Branch/Mail Code: Phone Number: 202-566-0369 FAX Number:																																																																		
Other Agency Official Name  <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>		Branch/Mail Code: Phone Number: FAX Number:																																																																		
Contracting Official Name    Brad Heath <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>8/1/2017 (Date)</div> </div>		Branch/Mail Code: Phone Number: 513-487-2352 FAX Number:																																																																		

**PERFORMANCE WORK STATEMENT  
CONTRACT EP-C-16-003  
WORK ASSIGNMENT 1-35**

**Title:** Phase 2 Mystic River Watershed Eutrophication Analysis

**Work Assignment Contracting Officer's Representative (WACOR):**

Mark Voorhees  
US Environmental Protection Agency, Region 1  
5 Post Office Square, Suite 100  
Boston, Massachusetts  
Mail Code: OEP 06-4

Phone: 617-918-1537  
Fax: 617-918-0537  
[voorhees.mark@epa.gov](mailto:voorhees.mark@epa.gov)

**Alternate Work Assignment Contracting Officer's Representative (Alternate WACOR):**

Erik Beck  
US Environmental Protection Agency, Region 1  
5 Post Office Square, Suite 100  
Boston, Massachusetts  
Mail Code: OEP 06-1

Phone: 617-918-1606  
Fax: 617-918-0606  
[beck.erik@epa.gov](mailto:beck.erik@epa.gov)

**Period of Performance:** August 1, 2017 through June 30, 2018

**Background:** During 2016, EPA issued a work assignment (WA) to Environmental Research Group (ERG), WA 4-61 under Contract EP-C-012-021, to support EPA Region 1 in carrying out the initial phase (henceforth referred to as Phase 1) of the Mystic River Watershed eutrophication analysis. The focus of the Phase 1 analysis is to begin the process of developing analytical tools for EPA Region 1 to estimate phosphorus load reductions that are needed from the Mystic River watershed to attain applicable Massachusetts surface water quality standards (MA SWQS) related to cultural eutrophication. An additional objective of the Phase 1 project was to begin the process of collaborating with project partners, the Massachusetts Department of Environmental Protection (MassDEP), the Mystic River Watershed Association (MyRWA) and the Massachusetts Water Resource Authority (MWRA) towards developing watershed nutrient management strategies.

The Phase 1 project will be completed in September 2017 and is expected to provide much of the foundational groundwork for the tasks specified under WA 1-35. Therefore, this WA shall build upon and complete work that was begun during Phase 1. Specifically, Phase 1 will have selected the analytical modelling approaches to support achieving the project's primary goal of quantifying phosphorus load reductions needed for the Mystic River watershed. During Phase 1, an evaluation of modelling approaches was conducted that resulted in the selection of a hybrid watershed modelling approach that will apply EPA Region 1's Opti-Tool to calculate land-use based loads with empirical based spreadsheet models for watershed routing/attenuation and the Bathtub model for receiving water quality modelling at two critical locations covering three waterbody segments in the Mystic River system. Phase 1 documentation describes the process of considering numerous factors such as data availability and project resources and how the selected modelling approaches for the Mystic River watershed aligns with primary project objectives of supporting watershed management actions.

Phase 1 and the focus of this WA (Phase 2) is intended to support elements of EPA's TMDL Vision process by providing technical support for watershed restoration efforts in the Mystic River watershed. This project provides an opportunity to target multiple TMDL Vision Goals: developing an "Alternative" to a TMDL, "Engaging" with the state and watershed group, and "Integrating" a plan to address multiple Clean Water Act programs, such as point and non-point water pollution, and other EPA programs such as Superfund and Environmental Justice. Within the Mystic River Watershed, the Massachusetts Department of Environmental Protection (MassDEP) is already engaged in this process through two pilot studies applying their newly developed Watershed Based Planning Tool. The work described below would further support that initiative through assisting in assessing the validity and value of the results from the Watershed Based Planning Tool as a TMDL Alternative.

The Mystic River Watershed is a 76 square mile watershed located in the Greater Boston, Massachusetts area that encompasses all of, or portions of 22 urban and suburban communities. The watershed faces multiple water quality impacts related to cultural eutrophication including excessive algal growth, harmful cyanobacteria blooms and excessive native and invasive macrophyte growth. Sources of pollutants from the watershed include stormwater runoff, Combined Sewer Overflows (CSO's), Sanitary Sewer Overflows (SSO's), non-point runoff, toxic substance contamination and three recognized Superfund sites. The watershed suffers from many legacy pollutants as well as present day pollutant loadings. Several environmental justice communities are located within the watershed and there is high development pressure throughout the entire watershed.

The Mystic River is listed as a Category 5 water body on the Massachusetts 2014 303(d) List of Impaired Waters for phosphorus, Arsenic, Chlordane, Chlorophyll, DDT, dissolved oxygen, *E. coli*, PCB in Fish, Secchi depth, and sediment bio-chronic Toxicity. Due to the multiple stressors present in this watershed, development of a Total Maximum Daily Load (TMDL) to address all of the pollutants would be a lengthy and complicated task given available resources. However, this is an excellent opportunity to begin to address impairments through elements of the recent EPA/State TMDL Vision process by focusing on nutrient management. Through other regional efforts, the Region has determined that effective nutrient management will likely go a long way towards addressing sources of other impairments (e.g., bacteria, sediment bound contaminants).



Moreover, MyRWA is actively engaged in collecting water quality data and promoting resource protection. MyRWA has completed over sixteen years of water quality monitoring as part of a baseline bacteria, nutrient and aesthetics monitoring program and is currently working on a supplemental focused monitoring program to support developing estimates of nutrient loading to the Mystic River through the use of flow gages and auto-samplers. MyRWA, in conjunction with MassDEP, are ideal partners to engage with to address water quality impairments. Planning meetings have already occurred annually to update all partners on progress and strategically plan next steps.

Stormwater runoff from developed areas of the Mystic River watershed is a dominant source of nutrient pollutant loading to the watershed's surface waters. Therefore, this project provides an excellent opportunity to pilot-test a user-friendly stormwater management optimization tool (Opti-Tool) developed by the Region. The Opti-Tool provides a means to evaluate options for determining the best mix of structural stormwater controls (SWCs) in a particular geographic area to achieve quantitative water resource goals. The Opti-tool incorporates scientifically robust model generated long term time-series of hourly runoff volume and nutrient concentrations, as well as regionally calibrated model input SWC performance parameters for total phosphorus (TP), total nitrogen (TN), total suspended solids (TSS), and Zinc (Zn). This project in the Mystic River Watershed also provides an opportunity to collaborate with local stormwater management practitioners to advance knowledge on conducting comprehensive stormwater management planning in the regional area.

Lastly, The Mystic River Watershed was designated as an Urban Waters Partnership Location in 2013. The Partnership works to improve coordination and focus among federal agencies on problems in the watershed. The focus of efforts in the Mystic River Watershed include: urban water restoration and monitoring, water quality awareness, scientific research, and environmental education. The partners are USGS, US Forest Service, USACOE, National Park Service, HUD, and FEMA. Work under this task order may have the potential for future collaboration.

This work assignment will support the following key areas of focus for EPA: urban stormwater, environmental justice, nutrients, and elements of the TMDL Vision process.

### **Purpose and Objective:**

The purpose of this WA is to conduct Phase 2 of the Mystic River watershed eutrophication analysis. Phase 2 will further support EPA Region 1 in finalizing the development and calibration of modelling approaches selected during Phase 1 for estimating watershed phosphorus loads and eutrophication-related water quality responses at three critical waterbody segments located within the Mystic River watershed. The calibrated water quality models will be used to set phosphorus load reduction targets for the contributing watershed areas to reduce the frequency and severity of algal blooms and eventually attain applicable MA SWQS.

Determining needed load reductions and beginning the process of developing watershed based phosphorus load reduction strategies will help to engage watershed communities in the process of becoming more aware of their role for instituting controls, practices and programs designed to mitigate the effects of uncontrolled stormwater runoff and other sources of nutrients (e.g., illicit discharges) on the water quality of the Mystic River. Increasing awareness will help to

encourage more immediate proactive engagement by communities to take advantage of opportunities to incorporate needed controls into redevelopment and urban renewal type projects, as well as developing and adopting more protective local ordinances. Additionally, EPA Region 1 intends to use this WA to support building MyRWA's capacity to apply the models developed under this WA as part of an anticipated future iterative management process for the Mystic River watershed.

Moreover, Phase 1 and the focus of Phase 2 is intended to support elements of EPA's TMDL Vision process by providing technical support for watershed restoration efforts in the Mystic River watershed. This project provides an opportunity to target multiple TMDL Vision Goals: developing an "Alternative" to a TMDL, "Engaging" with the state and watershed group, and "Integrating" a plan to address multiple Clean Water Act programs, such as point and non-point water pollution, and other EPA programs such as Superfund and Environmental Justice. Within the Mystic River Watershed, the Massachusetts Department of Environmental Protection (MassDEP) is already engaged in this process through two pilot studies applying their newly developed Watershed Based Planning Tool. The work described below would further support that initiative through assisting in assessing the validity and value of the results from the Watershed Based Planning Tool as a TMDL Alternative.

The Agency requires technical expertise to support the following project, which is designed to accomplish these goals and objectives in the New England States.

### **Scope of Work**

#### **Task 0 - Project Management**

**A) Develop Work Plan:** The Contractor shall prepare a Work Plan for EPA's approval. The Work Plan shall describe how the Contractor shall accomplish each of the tasks. The Contractor shall provide qualified staff to perform the work and a Project Manager to oversee all project activities.

**B) Project Coordination:** The Contractor will work closely with the WACOR and the existing Technical Advisory Committee (TAC). The Contractor will consult the WACOR for major technical decisions, especially during the Phase 2 project kickoff and the final project delivery meetings. It will be the responsibility of the WACOR to provide the contractor input on behalf of the TAC in a timely manner consistent with the deliverable due dates.

**C) Reporting:** The contractor shall provide electronic copies of the monthly progress reports to the WACOR and CL-COR. Each progress report shall describe the technical work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties.

## **Deliverables:**

- A) The Contractor shall submit a Work Plan in accordance with contract requirements **after the date of issuance of WA 1-35.**
- B) The Contractor shall maintain communication with the WACOR and shall host monthly conference calls throughout the project.
- C) The Contractor shall submit monthly progress reports in accordance with contract requirements.

## **Task 1 – Prepare Quality Assurance Project Plan**

EPA policy requires that an approved Quality Assurance Project Plan (QAPP) be in place for work that involves the collection, generation, evaluation, analysis or use of primary environmental data. The QAPP defines and documents how specific data generation and collection activities shall be planned, implemented, and assessed during a particular project. To accomplish some of the work assignment objectives, it will be necessary for the Contractor to use existing environmental information and data for the development of the watershed nutrient loading estimates and the development and calibration of the water quality models for the three critical waterbody segments in the Mystic River system. Therefore, the Contractor shall develop a QAPP for all activities that involve assembling, reviewing and using existing environmental information and data, as well as developing and calibrating the watershed phosphorus loading and receiving water quality models for the Mystic River watershed.

**Deliverables:** The Contractor shall provide a draft QAPP for EPA review **at the time of submitting the Work Plan.** The Contractor shall submit a final QAPP **within 5 business days after receiving comments on the draft QAPP from the WACOR.**

## **Task 2: Participate in Project Technical Steering Committee**

The Contractor shall participate on the Mystic River Eutrophication Technical Steering Committee (TSC) that was convened during Phase 1. TSC meetings will continue to be held during Phase 2 of the project to provide a forum for key project stakeholders to review and discuss progress at regular intervals, share expertise and insights and deliberate interim project decision points (e.g., selection of period of interest for conducting phosphorus load reduction analysis and are models sufficiently calibrated to achieve project goals?) The Contractor's participation in the TSC shall have the following primary two functions:

- 1) Provide technical expert advice/guidance on watershed phosphorus loading and water quality model evaluations, watershed stormwater management opportunities and options for managing excessive growth of aquatic macrophyte vegetation in slow moving impounded water bodies; and
- 2) Facilitate and participate in TSC meetings to present project progress/findings and important underlying information needed to support a well-informed decision making process during the project.

**Deliverables:** The Contractor shall attend up to three TSC meetings for Phase 2 of the project.

The Contractor shall present project progress and provide the necessary technical expertise to achieve the TSCs meeting objectives that will be discussed beforehand with the WACOR. It can be assumed that the TSC meetings would be approximately every three months starting in October 2017 and ending in June 2018.

### **Task 3 – Finalize Watershed Phosphorus Loading Estimates**

The Contractor shall finalize development of average annual phosphorus load estimates for the watershed area sub-basins tributary to the freshwater portion of the Mystic River. This work shall build on the analyses being conducted under WA 4-61 ERG Contract EP-C-021-012 which involves delineation of sub-basins, watershed spatial data analyses, modelling approach selection, development of annual phosphorus load estimates using the Opti-Tool Hydrological Response Unit (HRU) models and consideration of attenuation factors within the watershed.

Under this task, the Contractor shall calibrate models for estimating annual watershed phosphorus loads delivered to the three critical waterbody segments in the Mystic River system, (1) Lower Basin; (2) Upper lobe of Upper Mystic Lake; and (3) Main body of Upper Mystic Lake, and to the seven major lakes and ponds in the watershed that are currently not attaining MA SWQS due to excessive nutrient loadings (Blacks Nook Pond (MA71005), Cambridge; Horn Pond (MA71019), Woburn; Judkins Pond (MA71021), Winchester; Mill Pond (MA71031), Winchester; Spy Pond (MA71040), Arlington; Wedge Pond (MA71045), Winchester and Winter Pond (MA71047), Winchester).

The calibration process will involve using available water quality and flow gaging data from the Mystic River system, identified in WA 4-61, to inform developing best estimates of watershed routing processes, directly connected impervious cover, and if necessary Opti-Tool loading rate estimates. The modeling processes used in Opti-Tool for calculating loading rates have already undergone a rigorous calibration process using extensive storm water quality data and relevant studies applicable to the New England region. As part of the calibration process, the Contractor shall estimate the annual phosphorus load captured by each of the seven major lakes and ponds using a readily available empirical approach that requires only estimates of lake/pond hydraulic retention time and volume. The Contractor shall consult with the WACOR on the approach to be used to estimate the phosphorus load captured by the lakes/ponds prior to developing the estimates.

The Contractor shall prepare a technical memorandum describing the modelling approach and calibration process used to develop the watershed phosphorus load estimates. The memorandum shall also provide a summary of the results and an assessment of the calibration results in accordance with the QAPP. The memorandum should provide sufficient detail to allow an independent reviewer to evaluate the modelling approach and results of the calibration process. EPA anticipates that the watershed models to be developed under 4-61 will be represented in spreadsheets that provide all watershed factors used to calculate phosphorus load estimates and account for routing and or attenuation processes in the watershed areas. EPA expects that the methodology applied to calculate the delivered phosphorus load in spreadsheet models will be clearly understandable to independent reviewers.

**Deliverables:** The Contractor shall submit to the WACOR: 1) A draft technical memorandum describing the watershed phosphorus loading modelling approach and the calibration process/results; 2), Opti-Tool input files; and 3) All spreadsheet models (compatible with Excel) for all sub-basins, the three critical Mystic River waterbody segments and the seven major lakes/ponds **by November 15, 2017**.

The Contractor shall submit to the WACOR: 1) A final technical memorandum describing the watershed phosphorus loading modelling approach and the calibration process/results; 2) final Opti-Tool input files; and 3) all final spreadsheet models (compatible with Excel) for all sub-basins, the three critical Mystic River waterbody segments and the seven major lakes/ponds **by February 15, 2018**.

#### **Task 4 - Develop and Calibrate Bathtub Models for the Mystic River Watershed**

The Contractor shall develop and calibrate Bathtub models for the three critical waterbody segments in the Mystic River system: 1) Lower Basin; 2) Upper lobe of Upper Mystic Lake; and 3) Main body of the Upper Mystic Lake. The Bathtub models shall be applied at these locations at appropriate spatial scales for determining annual phosphorus loading capacities and reductions in annual watershed phosphorus loadings that are needed to attain eutrophication related MA SWQS. This task is comprised of the two following subtasks:

**A: Develop Bathtub Modelling Approach:** The Contractor shall use best available morphological, water quality and hydrologic data to develop the Bathtub models for these three segments. EPA has recently collected morphological data in the Lower Basin and the Upper Mystic Lake and expects to provide these data to the Contractor by November of 2017. The Contractor shall prepare a technical memorandum that describes the Contractor's proposed approach to develop and calibrate the Bathtub models including model segmentation, calibration period, and identification of all datasets and watershed phosphorus loading estimates (Task 3) to be used in the calibration process for the models.

**B: Calibrate Bathtub Models:** Upon receiving comments from the WACOR on the modelling approach technical memorandum (the WACOR will be responsible for coordinating reviews from the TSC), the Contractor shall develop and calibrate the Bathtub models and prepare a technical memorandum that describes the modelling approaches and presents results of the calibration process including an assessment of the calibration results for each of the Bathtub models. The memorandum should provide sufficient detail to allow an independent reviewer to evaluate the modelling approaches and results of the calibration process.

#### **Deliverables:**

- A) The Contractor shall submit to the WACOR a technical memorandum that describes the Contractor's proposed approach to develop and calibrate the Bathtub models **by December 15, 2017**.
- B) The Contractor shall submit to the WACOR a draft technical memorandum that describes the modelling approaches and results of the calibration process for each of the Bathtub models **by February 15, 2017**. The contractor shall address comments received on the draft technical

memorandum and submit a final technical memorandum **within 15 days of receiving comments from the WACOR.**

### **Task 5 – Conduct Watershed Phosphorus Load Reduction Analysis**

The Contractor shall use the calibrated watershed loading and receiving water Bathtub models developed under Tasks 3 and 4 to estimate watershed based annual phosphorus load reductions that are needed to attain eutrophication-related MA SWQS in three critical waterbody segments: 1) Lower Basin; 2) Upper lobe of Upper Mystic Lake; and 3) Main body of Upper Mystic Lake. The Contractor shall use the nutrient related water quality endpoints selected during Phase 1 of the project (e.g., seasonal average chlorophyll *a*, total phosphorus concentrations and percent macrophyte coverage) to conduct the analyses. This work shall be comprised of the following subtasks:

**A: Identify Critical Period of Interest for Phosphorus Load Reduction Analysis:** The critical period of interest will be the climatic period for which the Mystic River watershed phosphorus load reduction analysis shall be conducted. This period should be representative of critical climatic conditions related to the water quality endpoints selected for this project and that are likely to lead to excessive algal growth and cyanobacteria blooms in the Mystic River system. A multiple year period (e.g., 5 years) may be needed to capture varying critical conditions that could lead critical eutrophication-related conditions in the Mystic River system. The contractor shall evaluate climatic conditions in the Mystic River watershed (year 2000 to present) and recommend to the WACOR in a brief technical memorandum a critical period of interest to be used for the phosphorus load reduction analysis for the Mystic River watershed.

**B: Develop Watershed Phosphorus Loading Estimates for Critical Period of Interest:** Upon approval of the critical period of interest from the WACOR, the Contractor shall apply the calibrated watershed phosphorus loading models developed under Task 3 to estimate annual phosphorus loads and flows delivered to the three critical Mystic River waterbody segments for which Bathtub models have been developed under Task 4. Should the critical period of interest differ from the period of time represented in the calibration process then it may be necessary for the Contractor to recalculate HRU annual phosphorus load rates using Opti-Tool and the annual phosphorus load captured for each of the seven major lakes/ponds. Phosphorus loads and flow volumes from the watershed models shall be used as inputs to Bathtub models.

The Contractor shall develop annual phosphorus load delivery estimates for each sub-basin, the three critical Mystic River waterbody segments and each of the seven major lakes and ponds for the critical period of interest. The estimates shall be provided in the spreadsheet models that provide all watershed factors used to calculate loads and represent watershed routing and/or attenuation. The final phosphorus load estimates for the seven major lakes/ponds shall also include the estimated annual phosphorus load captured by each lake/pond for the critical period of interest.

**C: Apply Bathtub Models to Estimate Watershed Phosphorus Load Reductions:** The Contractor shall apply the calibrated Bathtub models for the critical period of interest to determine the allowable phosphorus loading capacities of the three critical Mystic River waterbody segments using the nutrient related water quality endpoints selected during Phase1 of the project. The



Bathtub models shall also be used to estimate the corresponding average annual phosphorus load reductions that are needed from the contributing watershed areas to attain eutrophication-related MA SWQS using the selected endpoints. The Contractor shall prepare a technical memorandum that describes and presents the results of the phosphorus load reduction analysis.

**Deliverables:**

- A) The Contractor shall submit to the WACOR a technical memorandum summarizing the results of climate/water quality analysis and a recommendation for the critical period of interest to be used in the phosphorus load reduction analysis **by March 15, 2018.**
- B) The Contractor shall submit to the WACOR all final Opti-Tool input files and spreadsheet models (compatible with Excel) for all sub-basins, the three critical Mystic River waterbody segments and the seven major lakes/ponds for the critical period of interest **by April 15, 2018.**
- C) The Contractor shall submit to the WACOR a draft technical memorandum that describes and presents the results of the phosphorus load reduction analysis **by April 15, 2018.**

**Task 6 – Develop Broad-Based Nutrient Stormwater Management Strategies for Mystic River Watershed using Opti-Tool**

The Contractor shall apply Opti-tool to the Mystic River Watershed to develop broad-based stormwater management strategies to identify the most cost effective management approaches for achieving a wide range of nutrient load reductions including the load reductions that will be needed to attain SW WQS. EPA Region 1's primary goal for this task is to develop information that can be shared with watershed communities to help them better understand the range of stormwater management opportunities that exist within their portions of the watershed.

**A) Develop Scope:** The Contractor shall collaborate with the WACOR and the TSC to develop a scope for applying the Opti-Tool in the Mystic River watershed and to provide information about stormwater management opportunities that exist within the watershed communities; particularly opportunities that may arise during future redevelopment and urban renewal projects. The Contractor shall consider using EPA Region 1's Opti-Tool case study done for the Buzzards Bay Region as a potential starting point for developing the scope of this Task's analysis

**B) Conduct Opti-Tool Analysis:** EPA expects that the Contractor shall use the results of the geographic watershed spatial data analyses conducted during Phase 1 to identify watershed features (e.g., impervious cover, land-use, soils, slopes, depths to groundwater, etc.) and corresponding stormwater management categories to broadly apply Opti-Tool to the Mystic River watershed for the critical period of interest. EPA expects that Opti-Tool analysis results will help to further identify optimal stormwater control (SWC) categories and sizing approaches that could increase both the technical and economic feasibilities of retrofitting needed SWCs into developed watershed areas. The Contractor shall develop a draft technical memorandum describing the Opti-Tool analysis, its results and include recommendations on broad-based stormwater management opportunities that watershed communities can begin to consider. The contractor shall provide an accounting of the stormwater management categories and corresponding watershed features by municipality for all sub-basins, the three critical Mystic River waterbody segments and the seven major lakes/ponds sub-basins in spreadsheets.

## **Deliverables:**

- A) The Contractor shall submit to the WACOR a draft scope for the Mystic River watershed Opti-Tool analysis **by March 15, 2018.**
- B) The Contractor shall submit to the WACOR: 1) A draft technical memorandum on the Opti-Tool analysis **by May 1, 2015**; 2) A final technical memorandum of the Mystic River watershed Opti-Tool analysis **within 15 days of receiving comments from the WACOR**; and 3) All final Opti-Tool input files used in the Task 6 analysis and spreadsheets (compatible with Excel) that provide an accounting of stormwater management categories and corresponding watershed features by municipality for each sub-basin, the three critical Mystic River waterbody segments and the seven major lakes/ponds for the critical period of interest **by June 1, 2018.**

## **Task 7 – Independent Technical Reviews**

The Contractor shall select two experts in the fields of limnology and nutrient modelling to conduct an independent expert review of the nutrient modelling efforts and nutrient and eutrophication response variable endpoints that will be completed for this project. The goal of this review is to provide an independent assessment of the work that has been completed and to provide constructive feedback to EPA, the TSC and the Contractor's project team during the project and to make recommendations on any future improvements to the modelling work, nutrient and eutrophication response variable endpoints as well as implementation strategies to assist MyRWA and Mystic River watershed communities as they work to reduce nutrient loading in the watershed. The two independent reviewers shall prepare final summaries of their reviews and include an overall evaluation of the modelling tools for supporting nutrient management actions in the Mystic River watershed. The Contractor shall invite the independent technical reviewers to present their findings at the final project TSC meeting.

**Deliverables:** The Contractor shall submit to the WACOR the written summaries of the reviews conducted by the independent technical reviewers of the Mystic River nutrient modelling work **by May 15, 2018** and the reviewers shall present their findings **at the final project TSC meeting** (date not yet determined).

## **Task 8 – Public Outreach Meeting**

The Contractor shall attend and lead a public outreach meeting for all Mystic River watershed communities and stakeholders. The goal of this public meeting will be to share the results of this project and make recommendations on what the communities and stakeholders can do to implement the nutrient reduction recommendations resulting from this project. The Contractor shall structure the meeting to include time for a presentation on the project background, results and future implementation recommendations, as well as adequate time for public comment and questions and answers. The Contractor shall not be responsible for arranging the logistics (e.g., meeting place) for the meeting.

**Deliverables:** The Contractor shall attend and lead a public outreach meeting for the Mystic River watershed by **June 30, 2018.**



## Task 9 – Final Report

The Contractor will prepare a final report that summarizes the background, results and recommendations from this project. EPA envisions that much of the written materials provided for the various project Task technical memorandums can be readily incorporated into the final report. The Contractor shall also provide in the main body of the final report, or as appendices to the final report, or as electronic files (in an EPA compatible format) the following information: Data used for nutrient and eutrophication response variable endpoints; Data used for modeling; Model calibration inputs; Model results; Model spreadsheets; Geographic Information System (GIS) shapefiles and raster files and GIS analyses.

**Deliverables:** The Contractor shall submit to the WACOR: A draft final report for the Mystic River Watershed Eutrophication Analysis **by June 1, 2018**; and 2) A final Report **within 15 days of receiving comments from the WACOR but no later than June 30, 2018**.

### Deliverables Required and Schedule for Completion of Tasks

Task	Item Required	Due Date	Number of Copies and Format Requirements
<b>0</b>	A) Work Plan B) Monthly conference calls C) Monthly progress reports	A) In accordance with contract requirements B) Every Month C) In accordance with contract requirements	A) 1 in electronic format B) Conference calls C) 1 in electronic format
<b>1</b>	A) Draft Quality Assurance Project Plan (QAPP) B) Final QAPP	A) With work plan B) Within 5 Business days of receiving comments from WACOR.	A) 1 in electronic format B) 1 in electronic format
<b>2</b>	Attend TSC Meetings	Between October 1, 2017 and June 30, 2018	In -person meeting
<b>3.</b>	Draft Technical Memorandum, spreadsheet models, and Opti-Tool input files  Final Technical Memorandum, spreadsheet models, and Opti-Tool input files	November 15, 2017  February 15, 2018	1 in electronic format  1 in electronic format
<b>4</b>	A) Technical Memorandum on Bathtub Modelling Approach  B1) Draft Bathtub Modelling Technical Memorandum  B2) Final Bathtub Modelling Technical Memorandum	A) December 15, 2017  B1) February 15, 2018  B2) Within 15 days of receiving comments from WACOR	A) 1 in electronic format  B1) 1 in electronic format  B2) 1 in electronic format
<b>5</b>	A) Technical Memorandum on Critical Period Analysis	A) March 15, 2018	A) 1 each in electronic format

	B) Final Opti-Tool Input Files and Spreadsheet Models	B) April 15, 2018	B) 1 each in electronic format
	C) Draft Technical Memorandum on Phosphorus Load Reduction Analysis	C) April 15, 2018	C) 1 each in electronic format
<b>6</b>	A) Scope for Opti-Tool Analysis	A) March 15, 2018	A) 1 each in electronic format
	B1) Draft Technical Memorandum on Phosphorus Load Reduction Analysis	B1) May 1, 2018	B1) 1 each in electronic format
	B2) Final Technical Memorandum, Opti-Tool Input Files, and Accompanying Spreadsheets	B2) Within 15 days of receiving comments from WACOR	B2) 1 each in electronic format
<b>7</b>	Review Summaries by Independent Technical Reviewers	May 15, 2018	1 each in electronic format
	Present Findings at TSC Meeting	To be determined but no later than June 30, 2018	In-person
<b>8</b>	Public Outreach Meeting	To be determined but no later than June 30, 2018	In-person
<b>9</b>	Draft Final Report	June 1, 2018	1 each in electronic format
	Final Report	Within 15 days of receiving comments from WACOR but no later than June 30, 2018	1 each in electronic format

**Estimated Level of Effort:** EPA estimates **966 hours** will be required to complete all tasks.

**Anticipated Travel Requirements:** Travel for up to 3 persons on one day to Boston, Massachusetts to attend public outreach meeting. Technical directions will be issued by the WACOR within 2 weeks of the scheduled trip to clarify the specific travel dates and the number of persons required for the following tasks:

<b>Task</b>	<b>Travel Destination /Purpose</b>	<b>Travel Destination /Purpose</b>
8	Public Outreach Meeting	Boston MA Area – lead meeting and give presentations

**Additional Requirements:** Office direct costs (ODCs) for copying, postage/courier, supplies, computer usage, and graphics are allowed.

Upon issuance of written technical direction, the Contractor shall submit for inspection of all work in progress at any time under this work assignment. The Contractor shall develop and maintain files supporting each task.

The Contractor shall contact the WACOR and/or the Contract Level Contracting Officer's Representative (CL-COR) by telephone to discuss any problems that may adversely affect the work on this Work Assignment. Within five (5) calendar days the Contractor shall follow the phone call with a brief written explanation of the problem, including any actions already taken, and/or recommended solutions to correct the problem. Written explanation shall be made available to the WACOR and the CL-COR.

**Contractor Identification:** To avoid any perception that Contractor personnel are EPA employees, the Contractor shall assure that Contractor personnel are clearly identified as independent Contractors of EPA when attending meetings with outside parties or visiting field sites.

**Organizational Conflict of Interest:** The Contractor shall warrant that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the Contractor has disclosed all such relevant information. See contract clause 1552.209-71 Organization of Conflict of Interest.

**Notification of Conflicts of Interest Regarding Personnel:** The Contractor shall immediately notify the CL-COR and the Contracting Officer of (1) any actual or potential personal conflict of interest with regard to any of its employees working on or having access to information regarding this contract, or (2) any such conflicts concerning subcontractor employees or consultants working on or having access to information regarding the contract, when such conflicts have been reported to the Contractor. A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. See Section H.4, contract clause EPAAR 1552.209-73 Notification of Conflict of Interest.

**Project Employee Confidentiality Agreement:** The Contractor agrees that the Contractor employee will not disclose, either in whole or in part, to any entity external to the EPA or the Contractor, any information or data (as defined in FAR Section 27.401) provided by the government or first generated by the Contractor under this contract or any site-specific cost information without first obtaining the written permission of the CL-COR.

**Conference/Meeting Guidelines and Limitations:** The Contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The WACOR will then prepare approval internal paperwork for the event and will advise the Contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.